The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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MR. JAMES H. CROFTS, STOCK AND SHARE BROKER AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.
BUSINESS negociated in Stocks and Shares not having a general market value.
Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.
MINES INSPECTED.
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

SPECIAL DEALINGS in the following, or part:—

50 Almada, 13s. 3d.	75 Kapanga, 19s. 3d.	30 Panulcilo, £7.
25 Bedford United, £2 4 6	25 Killifreth, £5 3s. 9d.	50 Prince of Wales, 8s.
20 Bratsberg, 38s. 9d.	50 La Plata, £2 3s.	call paid.
130 Carnarvon Cop., 7s. 9	20 Langford, 9s.	80 Pestarena, 4s. 9d
50 Callao Bis, 7s. 9d.	70 Last Chance, 9s.	20 Ruby, £2 2s. 6d.
25 Chile Gold, 13s. 6d.	10 Leadhills, £3¼.	50 Rhodes Reef, 20s.
50 Consolidated, 4s. 9d.	50 Marke Valley, 9s.	20 Richmond, £7 15s.
50 Devala Cen., 20s.	10 Mona, £4 10s.	25 Roman Grav., £9.
20 D'Eresby Mount. 13s 6	50 Mounts Bay, 8s. 9d.	25 Sierra Buttes, 27s. 6d.
30 Devon Con., £5½.	25 Morfa Du, 5s.	10 S. Condurrow, £9½.
150 Devon Friend., 4s. 9d	50 Mysore Gold, 11s. 3d.	50 South Darren, 17s.
70 Don Pedro, 5s. 6d.	75 Mysore Reef, 3s.	50 S. E. Wynaad, £2 11 3
80 Drakewalls, 10s. 3d.	50 No. Herodsfoot, 3s.	50 So. Devon Uni., 20s.
50 East Blue Hills, 10s. 3	50 Nouv. Monde, 8s. 3d.	50 Sortridge, 4s.
40 E. Chiverton, 30s. c.p.	20 No. Penstruthal, 7s 6	100 Simon's Reef, 2s. 6d.
20 East Lovell, 29s., c. p.	call paid.	150 Tanker. Gt. Con., 6s 3
20 E. Roman Grav., 8s.	50 New W.Caradon, 4s. 6	100 West Devon, 6s. 3d.
25 Frontino, £2 13s. 9d.	call paid.	75 West Phœnix, 10s.
60 Glenrock, 29s.	50 Old Owlacombe, 2s.	50 West Caradon, 9s. c.p.
50 Glenroy, 5s.	50 Old Shepherds, 13s. 9	50 West Crebor, 9s.
25 Gold Coast, 26s.	25 Organos.	20 West Polbreen, 20s.
25 Grogwinion, 15s.	20 Pandora, 5s.	10 West Kitty, £15¼.
25 Gwydyr Amal., off.w.	40 Polrose.	20 Wheal Crebor, £2 5s.
20 Hingston Down, 15s	50 Port Phillip, 4s.	75 Wheal Jane, 22s. 6d.
25 Hoover Hill, 4s. 9d.	50 Potosi, 10s. 9d.	50 Wheal Jewell, 2s. 6d.
100 Herodsfoot, 4s. 3d.	50 Parys Copper, 7s. 9d.	25 Wheal Kitty, £2 2 6

*** SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.
*** SPECIAL BUSINESS at CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS — FOREIGN BONDS — SPECIAL BUSINESS.
Fortnighly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

OPTIONS, SINGLE or DOUBLE, dealt in at close market prices.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

INDIAN GOLD MINES.—SPECIAL BUSINESS in:—

	Indian Phœnix.	Rhodes Reef.
Devala Moyar.	Indian Kingston.	South-East Wynaad.
Devala Central.	Indian Trevelyan.	Tambracherry.
Indian Consolidated.	Mysore.	Wynaad Perseverance.
Indian Glenrock.	Ooregum.	

At CLOSE MARKET PRICES, free of commission.
*** Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond.
*** SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS.
TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.
Accounts opened for the Fortnightly Settlement
A List of Investments free on application.
MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Almada, 12s. 6d.	200 Glenroy.	150 Nouveau Monde, 7s. 6
100 Bwlch United.	20 Great Holway, £5½.	100 New Peevor.
25 Bedford United, £2¾	70 Gold Coast, 24s.	10 Organos (Gold), £3.
50 Bratsberg.	40 Gawton Copper.	150 Ooregum (Gold), £6.
100 Carnarvon Copper, 7s. 6d.	60 Hingston Down, 11s.	75 Pen-yr-Orsedd, 12s 6d
	100 Indian Trevelyan, 16s. 3d.	50 Panulcilo, £7½.
3 Cape Copper.		100 Potosi, 11s. 3d.
40 Copiapo, £3 13s. 6d.	100 Indian Glenrock, 31s. 3d.	40 Ruby (Old), £2 2s.
5 Carn Brea.		20 Richmond, £7 16s. 3d.
100 Canada Copper, 21s. 6	100 Indian Phœnix, 32s. 6	100 Rhodes Reef, 20s.
150 Chile Gold, 13s. 9d.	100 Indian Consolidated, 15s. 6d.	150 Sortridge.
50 Don Pedro, 5s. 3d.		25 South Devon, 20s.
70 Devala Central, 17s. 6	150 Javali.	20 Trevaunance.
100 Devala Moyar, 25s.	40 Kapanga, 20s.	100 Tankerville, 6s.
60 Devon Friendship, 5s. 6d.	15 Killifreth.	150 Wheal Jewell, 1s. 6d.
	100 La Plata, 43s. 6d.	15 Wheal Grenville, £10½.
15 Devon Cons., £5¼.	25 Mona.	
50 East Blue Hills.	100 Mysore Gold, 10s.	50 W. Godolphin, £1¾.
100 Eberhardt, 8s. 6d.	30 New Quebrada, £4 11 3	5 West Kitty.
30 East Chiverton, 20s.	70 New Trumpet Cons., 21s.	70 West Phœnix, 7s. 6d.
25 Frontino, £2 15s.		25 Wheal Crebor.

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise within the next few months.
MR. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

WHEAL GRENVILLE and WEST GODOLPHIN shares are recommended for investment at present prices.
WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

MR. E. J. BARTLETT, 30, GREAT ST. HELENS, LONDON, E.C., has special dealings in Stock Exchange Securities and Miscellaneous Shares of every description.

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.
ESTABLISHED 1861.
Bankers: London and Westminster, Lothbury, E.C.

ESTABLISHED 1868.
MESSRS. CUNLIFFE, ENTWISLE AND CO.,
FINANCIALISTS,
MINING AND CONSULTING ENGINEERS,
MINERAL ASSAYERS,
STOCK AND SHARE BROKERS,
77, BLOOMSBURY, OXFORD STREET; AND 2, UPPER BROOK STREET, MANCHESTER.
Bankers: Manchester and Oldham Bank (Limited), Pall Mall, Manchester.

BRITISH AND FOREIGN MINING OFFICES.
MESSRS. PETER WATSON AND CO.,
AUSTIN FRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

MESSRS. PETER WATSON AND CO.'S BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND METAL MARKETS—SHARE LIST, No. 845, VOL. XVII., for SEPTEMBER month, is now ready, and will be sent to customers on application.
Annual Subscription..... 5s. | Single Copy..... 6d
MESSRS. PETER WATSON AND CO.,
18, AUSTIN FRIARS, E.C.

MR. ALFRED E. COOKE,
DEALER in BRITISH and FOREIGN STOCKS and SHARES of EVERY DESCRIPTION.
(FROM 76, OLD BROAD STREET)
ESTABLISHED 1853.
9, OLD BROAD STREET, LONDON.

STOCKS AND SHARES FOR SALE.
Mr. ALFRED E. COOKE can SELL the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission:—
Where prices are not inserted, the market price of the day will be taken, or offers may be made:—

40 Bratsberg Cop., 38s. 3d	50 Indian Phœnix, 33s.	100 Parys Copper, 7s.
60 Callao Bis Gold, 8s. 9d.	100 Indian Trevelyan Gold, 16s. 3d.	30 Pioneer Copper and Lead, 10s.
100 Chile Gold, 13s. 9d.		
50 Canada Gold.	50 Indian Consolidated, 16s. 3d.	100 Prince of Wales Cop., 6s. 9d.
20 Canadian Copper.	40 La Plata Lead.	10 Richmond Silver.
50 Colombian Hydraulic Gold.	10 Leadhills, £3¼.	10 Ruby.
	50 Langford Silver.	100 Rhodes Reef.
50 Devon Friend., 4s. 9d	60 Mounts Bay Cop., 8s. 9	20 South-East Wynaad Gold, 2½.
90 Drakewalls Tin and Copper, 10s.	10 New Kitty Tin, £2½.	
	50 New West Caradon Copper.	60 Sortridge Copper and Tin, 4s.
10 East Lovell Tin.		
20 East Rose Lead.	20 No. Herodsfoot.	100 Tanker. Gt. Con., 6s.
100 E. Blue Hills Tin, 9s 6	100 Nouveau Monde Gold 7s. 3d.	35 W. Crebor Cop., 8s.
20 Frontino Gold, 2½.		10 West Kitty Tin.
25 Frongoch Lead.	40 North Blue Hills, 3s 6	30 W. Polbreen Tin, 21s.
40 Goginan Lead, 21s.	20 Old Shepherds Lead	20 Wheal Jane Tin.
30 Gawton Copper.	20 Organos, 2¾.	10 Wheal Agar Tin.
60 Herodsfoot, 4s. 6d.	25 Orita Gold.	10 Wh. Crebor Cop., 2¾s
25 Indian Glenrock Gold 31s. 3d.	50 Potosi Gold.	50 W. Devon Copper.

Many of the above shares can be sold for settlement by arrangement at the end of October account on payment of 20 per cent. deposit Shares not found in the above list may be purchased on application.
MR. ALFRED E. COOKE is a BUYER of shares in the following Mines:—

BRATSBERG.	NOUVEAU MONDE.
CALLAO BIS.	ORGANOS.
DEVON FRIENDSHIP.	ORITA GOLD.
INDIAN CONSOLIDATED.	TANKERVILLE.
LA PLATA.	WEST KITTY.
MOUNTS BAY.	

SELLERS must please state LOWEST POSSIBLE PRICE.
MR. ALFRED E. COOKE can transact business either as BUYER or SELLER in THE ABOVE and IN ALL OTHER MINES, also in RAILWAYS, FOREIGN STOCKS, AMERICAN RAILWAYS AND STOCKS, and MISCELLANEOUS SHARES, FREE of COMMISSION at CLOSEST POSSIBLE PRICES. CLIENTS can frequently do business at BETTER PRICES than with any Broker in LONDON or the PROVINCES.
TELEGRAMS and LETTERS receive immediate attention. All shares currently dealt in, bought and sold, free of commission.
SPECULATIVE ACCOUNTS OPENED ON RECEIPT OF COVER.
PRICES of every description of STOCKS and SHARES are received continuously throughout the day by TELEGRAPH from the STOCK EXCHANGE.
MR. ALFRED E. COOKE'S OFFICES are connected by TELEPHONE with the Subscribers to the United Telephone Company, whereby INSTANTANEOUS COMMUNICATION can be established in all parts of London. TELEPHONE NUMBER, 1268.
ALFRED E COOKE, 9, OLD BROAD STREET, LONDON.
(Opposite the Stock Exchange, with which the offices are in DIRECT TELEGRAPHIC COMMUNICATION.)

MR. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
Has special business in the following for cash or settlement by arrangement:—

Almada, 11s. 9d.	East Blue Hills, 9s. 6d.	Pioneer, 9s. 6d.
Akankoo, 7s. 9d.	Hoover Hill, 4s.	Rhodes Reef, 18s. 3d.
Bratsberg, 35s.	Indian Glenrock, 28s 8d	Ruby, 41s.
California, 13s. 6d.	Indian Phœnix, 31s. 6d.	Richmond, £7½.
Chile Gold, 13s.	Kapanga, 17s. 9d.	Sortridge, 3s. 9d.
Consolidated Ind., 15s. 3	La Plata, 43s.	So. East Wynaad, £2½.
Clitters, £4 1s.	Leadhills, £3 7s.	South Devon, 18s. 3d.
Callao Bis, 8s.	Last Chance, 8s. 9d.	Tankerville, 6s.
Colombian, 7s. 6d.	Mona Consols, 19s. 6d.	West Caradon, 10s.
Chontales, 1s. 6d.	New Kitty, 54s.	West Crebor, 8s. 6d.
Don Pedro, 4s.	Nouveau Monde, 7s.	West Kitty, £15 1s.
Devon Friendship, 4s.	Organos, £2 17s. 6d.	Wheal Crebor, 45s.
Devala Moyar, 23s. 9d.	Orita, £1½.	Wheal Kitty, 43s.
Eberhardt, 8s.	Prince of Wales, 6s. 9d.	Wheal Jane, 20s.

BANKERS: LONDON AND WESTMINSTER.

GRANVILLE SHARP, STOCK AND SHARE DEALER,
32, QUEEN VICTORIA STREET, LONDON, E.C.,
Recommends the purchase of shares in the
EAST CHIVERTON SILVER-LEAD MINE, and WHEAL JANE TIN MINE.
Full particulars on application.
BANKERS: LONDON AND WESTMINSTER, London, E.C.

HORACE J. TAYLOR, STOCK AND SHARE DEALER,
38, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C.,
BUYS and SELLS every description of STOCKS and SHARES at the closest market prices of the day, either by telegram or letter. All enquiries promptly replied to.
BANKERS: The CENTRAL BANK OF LONDON.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.
Established Twenty-five Years.
BANKERS: LONDON JOINT-STOCK, Princes-street.

Mr. REYNOLDS transacts business in all descriptions of Mining Property at net prices. He is in a position to obtain reliable information respecting mining shares, and advises upon such information on the receipt of a fee of 21s.. He spares neither time nor expense in securing for his numerous correspondents opportunities for obtaining the best investments. Fee allowed if business results.
Mr. REYNOLDS calls attention to the fact of his having persistently recommended West Kitty shares ever since they stood at 20s. each, and that when they stood at 10/. he cautioned holders, and gave his opinion that they would reach £15 this year. Others say they will reach £20.
Mr. REYNOLDS's letter appears in this day's Journal on page 1125.
WEST KITTY MINE AND TREVAUNANCE UNITED.
Reports of these important meetings appear in the Journal of Aug. 5, pages 958 and 959, and should be read by all interested and by the public generally.
NEW KITTY AND TREVAUNANCE.
Investors should strictly investigate the merits of these from reliable authority, and act accordingly. New Kitty meeting is reported in the Journal of Sept. 2 on page 1074.
WHEAL COATES.
Every shareholder should watch this concern as if its prosperity depended upon his exertions. Highly important meeting reported in the Journal of Sept. 2 on page 1074.

THE
"DIFFERENTIAL"
PUMPING ENGINE
(DAVEY'S PATENT),
FOR
DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION, SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL PUMPING PURPOSES.
HATHORN, DAVEY, AND CO.,
LEEDS.
HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MR. ALFRED THOMAS,
MINING AGENT, AND STOCK AND SHARE DEALER,
10, COLEMAN STREET, LONDON, E.C.
WHEAL SISTERS.—Wanted to Purchase, Shares herein. Sellers please state lowest price and number for sale.

HENRY GOULD SHARP, STOCK AND SHARE BROKER,
21, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1852.
Bankers—London and County Bank, Lombard-street, London, E.C.

SAFE DIVIDEND INVESTMENTS IN STOCKS AND SHARES PAYING 4 TO 8 AND 15 PER CENT. PER ANNUM ON OUTLAY.
SHARP'S INVESTMENT CIRCULAR.
THE SEPTEMBER EDITION (post free).
SHOULD BE CONSULTED BY INVESTORS AND SHAREHOLDERS IN STOCKS AND SHARES OF EVERY MARKETABLE DESCRIPTION.

A FIRST-CASS SAFE £9 5s. PER CENT. DIVIDEND INVESTMENT.
PHŒNIX UNITED TIN MINES,
near LISKEARD CORNWALL.
12,000 SHARES, £6 PAID, PRICE £3 5s. to £3 10s. PER SHARE.
H. GOULD SHARP SPECIALLY RECOMMENDS purchase of PHŒNIX UNITED SHARES at £3 5s. each, at which price they pay 9¼ per cent. per annum. This is one of the richest and most profitable mines in Cornwall.
INVESTORS SHOULD READ MY SUPPLEMENT ON THESE MINES.
Looking to the future of this property there is not a single dividend-paying mine in the two counties to compare with Phœnix United, and shares are cheap at £6 per share, which would only be £72,000 for the whole property.
PHŒNIX UNITED HAS PAID IN DIVIDENDS £206,400.
These mines have worked 70 years. There is a great future yet for this valuable property. An immense extent of tin ground laid open and yet to be worked.
THE BUILDINGS AND MACHINERY, ENGINES, &c., COST £70,000.
They are now selling about £40,000 worth of tin yearly. Sales will gradually and greatly increase, which will enable them to give large dividends.
NOTE.—A PHOTOGRAPH OF PHŒNIX UNITED MINES WILL BE FORWARDED TO ANY INTENDING INVESTOR, AND A PLAN OF THE VAST UNDERGROUND WORKINGS.
The dividend declared 31st August was 2s. per share for 16 weeks' working. The November dividend will be 2s. (or more) per share.

SAFE SHARES TO BUY—WILL RESUME DIVIDENDS IN 1883.
THE CHEAPEST TIN SHARES IN CORNWALL.
WHEAL JANE (TIN) MINE
KEA, CORNWALL.
12,288 SHARES. £2 1s. 8d. PAID. PRICE £1 2s. 6d. to £1 5s. EACH.
NOTE TO INVESTORS.—Compared with all the tin mines in Cornwall, Wheal Jane shares are the cheapest. The mine is paying current costs, and future prospects are excellent. The whole property is selling for about £13,500.
INVESTORS SHOULD READ MY SUPPLEMENT ON THIS MINE.
I specially advise the purchase of Wheal Jane shares for early dividends, and a rise of 100 to 200 per cent. during 1883.
£16,896 HAS BEEN PAID IN DIVIDENDS WHICH WILL BE RESUMED.
The mine is most efficiently equipped with machinery, and all paid for.
BUILDINGS, MACHINERY, ENGINES, &c., COST £20,000.
The mine has very speedily and greatly improved, and their sales of TIN FOR 8 MONTHS ENDING AUGUST, 1882, REALISED £6245
(Read report in this day's Journal.)
A MAP OF THE MINE FORWARDED (Post Free) SHOWING WORKINGS.

ORGANOS GOLD MINES (LIMITED).
15,000 SHARES OF £1 EACH.
SPECIAL NOTE—H. GOULD SHARP STRONGLY ADVISED the PURCHASE of ORGANOS SHARES in his JUNE CIRCULAR at 20s. per share for a CERTAIN RISE to £3 or £4 per share. My advice proved correct. Shares were £4¼ to £4½ on 5th August last. A good report—the result of their first crushing is expected this month. Shares may run up to £4 10s. again, or higher
SPECIALLY RECOMMENDED AT PRESENT PRICE FOR A RISE OF 100 PER CENT. Safe to Buy at £1 10s.

ORITA GOLD MINES (LIMITED),
20,000 SHARES OF £1 EACH.
H. GOULD SHARP in last week's Journal STRONGLY RECOMMENDED the PURCHASE of ORITA GOLD shares at £1 EACH for a CERTAIN RISE of ONE HUNDRED PER CENT. They may go to £4 or £4 10s., like Organos did.
They have already advanced 50 per cent. He now ADVISES the IMMEDIATE PURCHASE at £1 10s., they are CERTAIN to DOUBLE this price. Any one buying 500 to 1000 shares AT ONCE cannot fail to make money.

THE CHEAPEST LEAD SHARES IN THE MARKET AT 5s. PER SHARE.
HERODSFOOT SILVER LEAD MINE,
ST. KEYNE, LISKEARD, CORNWALL.
12,000 SHARES, 18s. PAID. PRICE 4s. TO 6s. PER SHARE.
H. GOULD SHARP still advises the purchase of HERODSFOOT SHARES at present low price as a capital speculation. The improvement in the 160 level north continues, worth 2 tons of ore per fathom. This looks well for the next level (175), where they have only a few fathoms to drive to meet the lode gone down in the 160 level.
PRESENT SALES OF SILVER-LEAD ORE, 90 TONS BI-MONTHLY.
With a rise in lead and a small further output dividends would be resumed.
A MAP OF THE MINE FORWARDED (post free), SHOWING WORKINGS.
The present company is in full working, and has already sold over
£15,000 WORTH OF SILVER-LEAD ORE.
INVESTORS SHOULD READ MY SUPPLEMENT ON THIS MINE.
They have an immense extent of lead ore ground unworked in the north part of the Mine for some 250 fathoms in length, and 65 fathoms in depth.
THE BUILDINGS AND MACHINERY, ENGINES, &c., COST £15,000.
Herodsfoot has been one of the richest and best dividend-paying Mines in Cornwall for silver-lead ore; it is still very productive, as sales of ore prove.
IN THE FORMER WORKING SHARES ROSE TO £52 EACH, AND £80,000 WAS PAID IN DIVIDENDS ON AN OUTLAY OF £8700.
Shares can be obtained for a few shillings, and are well worth buying up.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.,
Deals in all descriptions of STOCKS and SHARES at close market prices.

MR. JOHN L. M. FRASER
GREENFIELDS, WREXHAM.
(Eighteen Years' experience at the Great Minera and other Mines.)
Consulting Mining Engineer, &c Reports, Valuations, Surveys.
MINING PLANT, MACHINERY, STORES, AND MATERIALS at greatly reduced prices.
SHAREHOLDERS' AND INVESTORS' PROTECTION AGENCY.
Full particulars on application.
First Charge Mortgage Debentures from 6 to 10 per cent., in sums of £25, £50, and £100 each, on good security.
Strongly recommends LEAD and COPPER Shares for the inevitable great advance in the price of ores. Select list from personal inspection.

ROYAL CORNWALL POLYTECHNIC SOCIETY.

MINING CONFERENCE.

An important and influentially attended mining conference was held in connection with the Jubilee of the Royal Cornwall Polytechnic Society on Monday last, Mr. PETER WATSON, who has taken great interest in the proceedings, in the chair.

The CHAIRMAN said—Gentlemen, it is with great pleasure I find myself in your midst to-day, to take a part in the proceedings to be carried out at this meeting, all having reference to and being associated with the Jubilee Exhibition of the Royal Cornwall Polytechnic Society. Whilst I have been here I have been asking myself whether or not I should apologise for occupying the chair on this occasion; still my uppermost thought has been this—Have we not come here for the purpose of trying to do good to our fellows, and endeavouring to add to the knowledge of the people around us in every possible way, knowing that if we can accomplish this a lasting benefit will, we believe, accrue to this grand old county, and to every district, province, and colony where miners are at work digging for mineral treasure, and making it marketable in different parts of the globe. This being so it may not be necessary that I should offer an apology, but do all that lies in my power to make the meeting both agreeable and instructive. Looking at the faces of this assembly I can see at a glance that I am addressing a number of persons possessing great scientific and technical knowledge, many of whom have devoted the best part of their lives to literature, such as history, antiquity, and languages, while others have no doubt made a life study of the physical sciences. I think I can also see before me artists, some of whom are painters, in whose souls there is a genuine love of the beautiful, an inspiration (gifts from the Great Master Painter himself) which ever and anon guide their hands in wielding the pencil, until that which yesterday was a piece of canvas, fresh from the loom, has become to-day Doré's great picture "Christ at the Prætorium." There are doubtless others (who have attended the Exhibition) who have rolled up their shirt-sleeves, extracted a block of marble from the quarry, and shaped and chiselled the rude mass until it presents itself a splendid example of what may be accomplished in art, a good illustration of which we have in the beautiful fountain in the centre of this hall. I also see before me men of the highest eminence in the mechanical engineering world, who by careful research and plodding industry have been enabled to supply us us with splendid engines, compressors and rock-drills, dressing machinery, and appliances of every kind and degree; consequently, we may be excused if we consider ourselves a highly-favoured people. And last, but not least—and I cannot I think too strongly emphasise these words—come the mining engineers proper, with whom I would associate the hard working and industrious miners of Cornwall, several of whom have shown great interest in the exhibits, and fully appreciated the instructive addresses which have been delivered before the society, and to whom, in conjunction with their fellow labourers in other districts in England, Wales, and Scotland, the credit is in a great measure due for the intelligence displayed in the working of our mines of copper, tin, lead, coal, iron, china-clay, &c., as well as mines yielding the more precious metals, the annual output having increased during the last 30 years from 25,000,000*l.* to a sum exceeding the National Revenue of the United Kingdom. Of course, I speak subject to correction, but I do unhesitatingly assert that our British mines have made Old England socially great and politically powerful. I shall hereafter refer more in detail to the numerous useful inventions in connection with the pursuit of mining mentioned in the catalogue, and I will now ask those who have carefully examined the exhibits in the various departments spread before you at this Jubilee Assembly, if you have been able to follow me through my cursory remarks, whether I have sufficiently pointed out to you the importance of such exhibitions, and whether the things we have seen and the views exchanged thereon in connection with this institution have not supplied us with mental pabulum, which, if properly digested, will add to our pleasure and strengthen our knowledge as we advance through the world of art, science, and commerce. I would like now to move away from what for the want of a better term I will call the "classics" of the subject, and confine my remarks to talking "shop." I am, as many of you know, largely engaged in mining pursuits, not only in this county but in Devon, Shropshire, Scotland, the Isle of Man, as well as in the United States of America, New Zealand, and Asia Minor, and this being so I naturally feel a strong desire to see the development of our metallic mines conducted and managed on the most approved method. The rule of thumb, or management without order and intelligence, should by this time have become obsolete, and such a system—if system it can be called—superseded by a directing power and skill which call to their aid such modern appliances as the rock-drill, plunger-jiggers, self-acting machines, frames, buddles, and trunks, all well arranged to take the orestuff direct from the crusher or stamps, and thus save the labour and expense of shovelling, barrowing, and tramming the crushed ore from one machine to another. I wish to see levels pushed forward and cross-cuts driven at a speed consistent with the requirements of the times, availing ourselves of the service of rock-boring machinery for the purpose, and which really means a rate of progression at least three or four times greater than by hand boring. We should also have our dressing-floors and machinery so arranged as to do the work required of them at the cheapest possible rate per ton of ore, the greatest factor in every machine being its economic worth—that is, its capability to make the "waste" too poor to be treated again—and the water which goes into the river from the machines as clear and as free from impurities as possible; and I am sure that by watchful care, each miner or workman, feeling a pride in his work, exercising the duty devolving on his manhood, and fostering the belief that what another man can do he can do. Cornish mining, British mining, and mining throughout the world will, even in the face of bad times and poor prices, be looked upon as a safe and legitimate field for the investment of capital. I will now, with your permission, draw your attention to a few of the exhibits illustrating the various means and appliances in use in underground work, and the development of mines as well as the ore-dressing operations at surface. First, we have the model of the prize man engine by the late Mr. Michael Loam, the father of Mr. Mathew Loam (whom I see present), and who will to-day have the honour of reading to you a paper on "The Man Engine." I may mention that this model was exhibited as far back as 1834, and I am informed obtained the first principal prize given by this society. Nos. 6, 7, 8, and 9 are various inventions by Mr. W. Husband, well known to fame for his mining appliances. Capt. W. Teague, jun., has contributed numerous inventions, among which are (No. 16) a model of tossing and packing machine, Buddle's patent valve for air compressor, air economiser, exhaust fan ventilator, ventilator for clearing smoke in levels, as well as a working model of a mine (Carn Brea) showing vertical and inclined shafts, and the adaptation of skip road in a crooked shaft; together with another model showing the possibility of working with any angle in a crooked or zig-zag shaft. For his valuable exhibits Capt. Teague has been awarded the silver medal. There is also a very excellent model (No. 44) of a skip road as worked at East Pool, submitted by Capt Bishop, which is so framed as to take up a much larger quantity of material than could be done by the old skip. There is an excellent model of a calciner by Oxland and Hocking, and a model of the old Cornish engine by Mr. Berringer. We now come to an important model (37), the Pulverizer, by Mr. F. Mitchell, who, I may mention, has taken a very lively interest in this Jubilee Exhibition, and to whom, I think, there is special thanks due. This simple but ingenious invention of Mr. Mitchell's is at work at the Red River and some of the mines, and it appears to be a valuable machine. One of the most significant improvements in mining, and which I have for a long period advocated, is the application of rock boring machinery to the development of our mines. Competing as we are with foreign countries in the production of metals, it behoves us to be in the van, and to take the initiative in opening up with the greatest expedition our own mineral resources by the important aid of rock drills and kindred auxiliaries. It is hardly necessary to remind you that the eminent and well known engineers, Messrs. Loam and Son, were among the first to introduce the new boring machinery with their invention, the Barrow rock drill, and which has proved a signal success. The firm exhibit three of their drills. There are also two very useful rock drills by Messrs. Holman Brothers, and which are doing good service at several mines. There is likewise the well known "Eclipse" rock drill submitted by Messrs. Hathorn and Co., and which has been largely used both in England and abroad. There is a further drill known as the "Excelsior" valveless drill, with fittings complete, which works expansively, exhibited by Mr. G. F. Wymer. One of the most important adjuncts to the rock drill is the air compressor of which Messrs. Hathorn exhibit their well known Reliance machine (air compressor). One of the most interesting exhibits is the model of an old Cornish engine made 50 years ago by Samuel Bawden, at Carn Brea, interesting not so much for finish as for its antiquity, and from the fact that the copper contained in the brass work was extracted from Cornish ore, and cast by the constructor himself. The Polytechnic Society produce a model of reversible stamps and whim attached. A model (142) of a battery of improved gravitation revolver stamps, of excellent construction, is exhibited by the well known Sandycroft Foundry Company, of Hawarden, near Chester. The well-known firm of Tangye Brothers (Limited) exhibit upwards of two dozen of their various productions of machinery, and for which they have been awarded the gold medal, their entire exhibit being most interesting. I should also mention there is a very valuable model of self-acting tin frames exhibited by Mr. J. Hendra, and, if I am correctly informed, they were made expressly at the request of Mr. Bolden (the agent of Mr. Bassett) in order to show the method of saving tin after leaving the various works at the mines and running into the Red River. This saving of tin from the accumulated residuum of our tin mines sufficiently demonstrates the fact that there is yet some further and more perfect system of tin dressing required. Mr. E. T. Newton submits his new pumping engine indicator, a very valuable instrument, likewise an improved miners' dial, and a new pocket dial, which takes the form of a walking stick. Mr. Henderson also exhibits (No. 67) an improved miners' dial, and plan with transverse section of South Wheal Frances, showing the dip of the great flat lode. No. 43 is a model submitted by Capt. W. T. White, of West Peevor Mine, of drawing appliances, showing the discharge and separation of stuff as working at West Peevor, drawing the tram wagon which is filled at the breast end of level or elsewhere, trammed to mouth of the shaft, and hoisted in a cage to surface, when it is run out and discharged into the passes for stamps, thus saving a considerable expense by a single filling and emptying. This is a method which, although it is comparatively new to Cornish mining, I have seen at work some eight or nine years ago at the Dyliffe Mines in Wales, known locally as the Bright and Cobden Mines, which were highly profitable to their owners. It has also been in operation for a considerable period at the well-known lead mines in Shropshire, known as the Roman Gravels, under the able management of Capt. Arthur Waters, who I am pleased to see present. No. 147 is an old mill stone for grinding tin ore, found in the remains of an old mill on Retallack Farm, Constantine. Crazing mills were among the earliest known mechanical appliances for pulverising tin ore, and fell into disuse during the 17th century. There are numerous other exhibits both of interest and value to the mining community, which had time permitted I should have been glad to refer to. Owing to a previous engagement I was precluded from attending the meeting of the Miners' Association of Cornwall on Thursday last, but I have seen and examined with great interest the plan of Dolcoath Mine, prepared by the manager, Capt. Josiah Thomas. Capt. Thomas has submitted a diagram of Dolcoath, showing the country rock as it is to be seen in what, perhaps, I may be allowed to designate zones, the first being killas which extended from surface down to about the 110 fm. level, in which copper ore in rich abundance was found, the other being granite, which prevails at present throughout the mine (the shaft being 400 fms. deep) penetrating which zone tin deposits of wonderful character and productiveness have been and still are *in situ* rewarding, and to reward all interested in that great enterprise, which up to date on a capital of about 46,000*l.* has given profits amounting to 560,000*l.*, in other words the mine has repaid the adventurers their capital 12 times over. The reference to this important mine leads naturally to the consideration of one or two questions of practical utility. Let a proper record be kept of the receipts and expenditure of every mine, charging every outlay to its proper account, including cost of machinery, amount paid for royalty, expenditure on capital account (whether for permanent improvement or purchase of ground) distinguishing it from that properly chargeable to revenue account, the number of fathoms of development underground detailed under their several heads, and on the other side the receipts from the sale of ore and other sources, the calls made, dividends declared, &c. This should be recorded yearly from the commencement, so that a reference to this register would show not only the development and produce of the mine, but its actual condition at the time of inspection, both as to its prospective resources (its reserves) and financially. Capt. Thomas has furnished you with a very interesting account of, perhaps, the largest and most important tin mine in the county of Cornwall. I may therefore be permitted to give you by way of illustration a *résumé* of the transactions of the well-known Devon Great Consols Copper Mine, of which I am Chairman and Managing Director. Although not a Cornish mine the situation of Devon Consols, as you are doubtless aware, borders on the county of Cornwall, adjoining as it does the River Tamar. Extent of workings, particulars of machinery, tramways, lines of rods, leats, inclined planes, foundry, railways, arsenic works, &c., throughout the mines:—Number of shafts, by means of which the underground operations are carried out, 13; total of pitwork in course of working, 1895 fms.; man engines, one at Wheal Josiah, 144 fms., and one at Wheal Emma, 190 fms., 2; length of drivages throughout the mines, 28,249 fms. 4 ft. 6 in.; winzes and rises, 6108 fms. 1 ft. 4 in.; shafts, 2574 fms. 0 ft. 9 in.=36,932 fms. 0 ft. 7 in., or nearly 42 miles; length of tramways underground, 5559 fms., or about 6¼ miles. The subject of practical mining offers inexhaustible scope for observation. I am, however, reminded that we are here to listen to several important papers to be contributed by well-known authorities all bearing on the subject of practical mining. I will, therefore, conclude my introductory remarks by giving you a short summary of the statistics of British and foreign mining, which have been compiled under my direction with great care, and which show in a striking manner the great superiority of the returns and market value of British over foreign investments in mines. Of British mines, commencing with copper, I find there are nine mines, with a subscribed capital of 257,576*l.*, which have declared in dividends 2,094,808*l.* 13s. 4d., the present market value of which is 496,062*l.*; 10 tin and copper mines, capital 338,194*l.* 12s.; dividends 1,552,333*l.* 7s.; market value 903,416*l.*; 1 copper and lead mine, capital 140,000*l.*; dividends 480,000*l.*; market value 60,000*l.*; 6 tin mines, capital 207,173*l.* 7s. 6d.; dividends 328,795*l.* 7s. 6d.; market value 222,687*l.* 10s.; 18 lead mines, capital 836,550*l.*; dividends 2,341,355*l.* 18s. 8d.; market value 1,301,285*l.* The grand total of these 44 mines show a subscribed capital in round numbers of 1,800,000*l.*, upon which dividends have been received of 6,800,000*l* (the present market value of which is 3,000,000*l.*), thus showing a net return of 400 per cent. upon original outlay. Of foreign mines the capital subscribed on 10 copper mines is 9,154,420*l.*; dividends declared, 4,208,234*l.*; and the present market value, 18,854,452*l.* On 12 gold mines (non-Indian), capital 1,288,020*l*; dividends declared, 2,319,617*l.* 6s.; market value, 4,151,666*l.* 5s.; on three lead mines, capital 165,000*l.*; dividends declared, 558,895*l.* 16s. 8d.; market value, 252,500*l.*; on four silver mines, capital 710,000*l.*; dividends declared, 715,075*l.*; market value, 1,118,125*l.*; on three silver-lead mines, capital 650,000*l.*; dividends declared, 357,916*l.* 13s. 4d.; market value, 430,000*l.*; the total of these 32 mines, showing on a subscribed capital in round numbers of 12,000,000*l.*; payment of dividends amounting to 8,000,000*l.*; being equal to a net return of 67 per cent., while the present market value is 24,800,000*l.* Of the Indian gold mines a capital has been subscribed in round numbers of 1¾ millions sterling, the market value of which is about two millions. No returns as yet have been made. The net return of the investments in British and foreign mines (omitting India) is about 15,000,000*l.*, on an outlay of 13,500,000*l.*, while the market value of these mines is represented by no less a sum than 27¾ millions. I will add that the value of the whole of the minerals produced in the United Kingdom during the year 1881 was 76,000,000*l.*, the chief product being of course coal, which amounted in value to 65,528,000*l.*, the quantity raised being 154,184,000 tons. Of iron over 17½ millions of tons were produced of the value of over 6,000,000*l.*, and the metallic ores (comprising tin, copper, lead, zinc, manganese, and arsenic) amounted to 1,725,000*l.*, the principal increase during 1881 being in the output of coal. There is one other subject upon which I would offer a few remarks which is calculated to have an important bearing upon the future underground working of our mines. I allude to the application of electricity as an illuminant and motive power. You assisted on Wednesday last at a very interesting exposition of the capabilities of the Swan incandescent light, and I need hardly remind you that the several gentlemen who are now addressing themselves scientifically to the perfection and completion of a light, which shall be both effective and economical for general use, are working equally in the interests of all "who go down into the bowels of the earth, and who extract therefrom treasures untold," and that the boon thus held out to the working miner, and which will undoubtedly be available by him in the near future, is one the value of which cannot be over estimated. Great as have been the wonders wrought by the steam-engine, by which distance has been almost annihilated, they will be surpassed by the wonderful revolutions which will be created by the introduction in our mines of the electric light as as illuminator. The advantages to be derived from its use will not be confined to a light which will irradiate the largest chamber or pierce the gloom of the longest gallery or level, but its introduction will tend materially to lessen the number of accidents which occur, while the temperature underground will not be sensibly increased, as is the case by the present unsatisfactory and unhealthy method. Let us hope that we may "one and all" live to realise the great benefits which will assuredly be ours, if we but fulfil our duty, accept the prizes which science offers to us, and logically work out the great subjects which we have been thinking about and describing at this Polytechnic Jubilee—a celebration which I am hopeful will not be without its influence in extending more widely the practical advantages to be derived from those national and legitimate sources of profit—fish, tin, and copper (Applause.)

VENTILATION IN MINES.

Capt. R. H. WILLIAMS, C.E., of Wheal Eliza, read a valuable paper "On the Ventilation of Working Places in Mines," and illustrated his lecture by diagrams. The earliest method he had been able to discover consisted of two men standing near the miner at work in the end, and shaking a large cloth or blanket to drive out the impure air from the working place. A very effective and never-failing machine—the waterfall—drove in air with a great force where a good fall, say, 15 to 20 fms., could be obtained. Steam, air, or water jets had from time to time been used for ventilation, and they would, no doubt, be always more or less used. The duck engine, worked by hand or attached to the pumping engine, had been often used to pump air to ends, winzes, and rises. In 1863, having some long levels driving, the ventilation wanted great attention, and after trying a series of plant he modified the jet and constructed it to play by a head of water. At first he used it to draw out or exhaust the impure air and gases from combustion of powder, fuses, and candles. Although considerably improving the state of the air, he did not think it perfect, and altered the arrangements so that the jet should force in fresh air to the ends. This proved most satisfactory, and on this principle all his ventilating appliances had been carried out since 1863. In this year the air was so bad at the Great Wheal Baddern Mines, Gwennap, that no means then available appeared to be satisfactory. He supplied them with one of his water jet air machines, and the manager sent him a most satisfactory testimonial of the great efficiency of the machine. He had used it in levels more than 250 fms. from any shaft with great effect, and had them at work under a water pressure of over 200 lbs. to the square inch. In 1864, the Royal Commissioners on Mines expressed a wish to see the water jet at work, and visited the mines when he had it in operation. The Chairman, Lord Kinnaird, went down to the 124 to see it at work, when holes were blasted with black powder. At this time, working a mine as he was under Tregrehan Park, where the surface could not be broken even for an air-shaft, long levels, some exceeding 400 fms., had to be driven, and in the extreme end of those levels the air was fresh, clear, and cool. This plan could easily be accomplished by means of an ordinary air compressor fixed at the surface of the mine, and the air was conveyed down the shaft and into the various levels by mains of 3 in. diameter.

TIN DRESSING.

Capt. CHARLES THOMAS (Cook's Kitchen) read a paper on "Tin Dressing." Having referred to the improvements made in other departments of mining, Capt. Thomas said that in tin dressing things remained just the same as ever—that was, every tin dresser had his own opinions, and stuck to them. He would refer to those sections of tin dressing where, in his opinion, it was possible that improvements might be made. His opinion was that 50 per cent. of the tin now running to waste ought to be and might be saved by the mines. In stamping the grateway was often too small. At Cook's Kitchen front grates were 28 in. by 9 in., and end grates 9 in. by 9. The size of the hole of course depended on the nature of the stuff stamped. Speaking of the classification of tin Capt. Thomas said "fine tin" offered serious difficulties; that was the tin which went to enhance the value of the tin streams being carried away in large quantities in the slimes. The great question was how could they untin the slimes? The round buddles in front of the stamps into which slimes and roughs were received together direct for the stamps was effectual in making the roughs react upon and comparatively untin the slimes. He drew their attention to a plan of a buddle, the dimensions of which were, external diameter, 21 ft, with a 10 ft. centre head. That left 5 ft. 6 in. of working space all round. Such a buddle kept going an axle of 12 or 16 heads stamping stuff of ordinary hardness. In stamping stuff, producing (say) 40 lbs. of tin to 1 lb. of stuff, the head might be tossed once and immediately calcined, while in stuff producing 75 to 100 lbs. of tin to the ton, the head might be calcined at once. Thus it was possible to take out 80 to 85 per cent. of the produce in the first process. But the great advantage was that the slimes were rendered quite 50 per cent. poorer than by any other process yet tried. With refereuce to the roughs, he suggested that the roughs be put through a jigger or some other mechanical separator to separate the remaining portion of the slimes. Such portion of them as might be found profitable should then be pulverised. Many returned the burnt leavings of the tin yard, but by far the best and safest method was to pulverise them. Referring to the labour question, Capt. Thomas said he was sorry to see that legislation for the last few years had a tendency to cause a wider breach between labour and capital. The enforcement of the Factory Act upon Cornish mines was an unwise step. The present mode of paying the dressing pare was old and defective, there being nothing in the tin-dressing department for a man of average or extra ability to aspire after, except in the solitary instance of the captain dresser. The overlookers, like the enginemen, were underpaid. One reason why so much tin found its way into the Red River was that a combination of carelessness and disinterestedness was too characteristic of their dressing operatives, and if they could by any means overcome these they would prevent a quantity of tin from going down the waste leats. The only way of dealing with them indirectly was through the overlooker, by making him practically interested in his work. In conclusion, Captain Thomas summarised his paper by saying—1, the gateway should be as large as possible, so as to facilitate discharge; 2, there should be no classification in front of the stamps; 3, roughs and burnt leavings could be better treated by pulverising than by any other means; 4, seeing that a considerable amount of tin was lost through carelessness, that abler and more efficient overlookers were required on the floors, and that they should be stimulated by higher pay.

The paper provoked a long and spirited discussion.

The CHAIRMAN considered no class of men were worse paid than the managers, engineers, enginemen, and dressers.—Captain R. H. WILLIAMS thought they had made wonderful strides in the dressing of tin, but he maintained that with all their appliances the tin lost in the mines of Cornwall now was more than the excess of value in the cost of dressing the tin 50 years ago.—The CHAIRMAN considered they were producing almost as much in quantity 27 years ago as now.—Mr. F. W. MICHELL said that although so much had

been done to expedite the dressing of tin, there was a very great difficulty experienced in West Cornwall in getting good dressing hands.—Capt. ABRAHAM JAMES did not think there was sufficient importance attached to keeping a stock-book on mines. (Applause.) He considered the present mode of assaying very defective. Referring to the Red River, he said he did not think all the tin sold from the Red River was actually washed down the Red River. Speaking of the buddle mentioned by Capt. Thomas in his paper, Capt. James thought if they could buddle a ton of stuff containing 40 lbs. of tin, and take up the head and toss it, and carry it to the calciner, it was a revolution in tin dressing never before witnessed. —Capt. RICH suggested, with reference to dressing, that they wanted more space and more machinery, and then they would be able to grapple with the question of waste.—Capt. W. TEAGUE, jun., did not think the Cornish mines were giving a fair percentage for their outlay. He agreed with Capt. Thomas that they should have competent men at the floors and better paid. Alluding to sampling tin he thought, instead of being sampled before it went to the stamps, it should be sampled after it left them.—Capt. BISHOP advocated the keeping of a stock-book.—Capt. CRAZE enforced the necessity of the use of clean water in driving operations.

Mr. R. TAYLOR gave some very interesting particulars of ore dressing of half a century ago, and incidentally remarked that he was the first who built a round buddle—invented by a Welsh mine captain—in Cornwall. He imagined the system advocated by Capt. Thomas was a very good system, and he hoped it would receive a trial.

Mr. FRECHEVILLE stated that at Wheal Grenville the burnt leavings went to the classifier before being puddled, and he was assured by the manager with most excellent results.

Capt. WHITE also enforced the necessity of the strictest attention being paid to economy. The less the ore had to be handled on the floors the better.

BORING MACHINERY.

Mr. JAMES HOSKING read a paper "On Rock Boring Machinery." Twenty years before the establishment of the Polytechnic Society that great inventor, Richard Trevithick, of Hayle, conceived and actually carried out, the idea of boring holes in rocks by machinery, but his machine was soon lost sight of. Still the necessities in railway and other tunnelling, as well as in mining, had demanded that the greatest possible force should be brought to bear upon very small areas, such as the face of the tunnel being driven; or in a mine the face of a level advancing to cut the lode or reach a deposit of mineral. This led to the invention of the percussive rock drill. Many great works would have been impossible without rock drills, and if they were possible the time necessary to complete them would have been so long that the interest due to the capital, before returns were made for the cost of construction, would have been so great as to render them financial impossibilities. The employment of boring machinery in their mines gave many advantages—to the adventurers the benefit of economy with increased chances of success; to the working miner, better ventilation produced by the exhaust air, and consequently better health and longer life; and to the landlord increased revenue. Comparatively few of the mines in Cornwall were now worked at a profit, and those that were were largely dependent on the rapidity with which their bottom levels could be opened by rock-drilling machinery. Others that were not at present in a paying state might be soon made good paying concerns by the use of boring machines. The diameter of drills best suited for this country appeared to be from 3 to 3½ in. There was yet a great field awaiting the further application of rock drills in Cornwall. Hitherto success in rising and driving had been very satisfactory, but surely with suitable gear they would soon see sinking and stoping done with equally good results. Probably the respective merits of rock drills should be judged by their durability, speed of boring, handiness for handling, and quantity of air required. With efficient rock drills and well trained men, there was another branch of the work that required the most careful attention, and that was the compression of air and the conveyance of it to the machines under ground.

In the course of the discussion the CHAIRMAN said that when the boring machine was first introduced for mining work, like many other things, a prejudice existed against it, but that, he was glad to say had broken down. It had now become indispensable, and the more they employed it the more they would open up their mines, and increase their profits. He thought there was a great improvement yet to be made in rock-drills, and it would be a great advantage if they could have a hand drill which men could handle in stopes and pitches. A much lighter machine than they had at present would facilitate mining operations. (Applause).—Mr. F. W. MICHELL said it behoved them to see how they could reduce the expense of rock-boring by boring machines. They should try to bring it down as near as possible to hand labour.—Capt. RICH believed boring machines were very excellent things, but he was prepared to set his contracts to any boring machine company, at hand labour price.—Mr. M. BAWDEN, Tavistock, Capts. CRAZE and NICHOLAS, and Mr. LOAM each spoke highly in favour of the boring machine, and Mr. J. STOKES also made a few remarks,—Mr. MICHELL asked Mr. Teague whether he considered it cheaper to open a fathom of ground by hand labour or boring machinery?—Capt. TEAGUE replied that at Tincroft and Carn Brea minute calculations were gone into, and it was found that the average cost for opening ground by boring machine was 16*l.* per fathom, whereas with hand labour it was 18*l.* or 20*l.*, but the important point was that with the boring machine they could do work now which they could not possibly have done before. (Applause). In a word, it meant the boring machine was one of the greatest benefits they had at the present time, and would enable mining to be kept up permanently. (Applause.)

THE MAN ENGINE.

Mr. M. LOAM read an exhaustive paper on "The History of the Man Engine." In 1833 the Polytechnic Society directed its attention to the great physical strain the miner was put to in ascending and descending, and from that time its history and the history of the man engine became inseperable. But the man-engine itself had its own previous history. In describing this Mr. Loam referred to how his father, abandoning the idea of raising miners by means of ropes, took up the idea of the rod, and perfected the man engine, which was about the year 1829. But the Consolidated Mines did not adopt it as he expected they would, much to the disappointment of his father, and Mr. John Paul, surgeon, Gwennap, who was associated with him. The action of the Polytechnic revived their hopes by taking the matter up. In 1839 Mr. Charles Fox and others offered a premium of 500*l.*, through the Society, to any adventurers who would erect a man engine, and in December, 1841, Tresavean Mine proposed to erect suitable machinery to the depth of 200 fms. and from that date the man engine came gradually into general use.

The CHAIRMAN, in concluding the proceedings, alluded to the satisfaction it gave them all to see them that day. Mr. Richard Taylor, F.G.S., who, he said, was one of the pioneers of the Polytechnic Society, suggested that centres should be formed in Cornwall and Devon for the collection of subscriptions towards the Society. There were many lads, perhaps, who, if prizes were offered, and they were encouraged, would turn out great inventors. Cornwall had turned out such men before, and so she would again. (Applause.) He suggested that as the Society devoted a great deal of attention to mining, all the mines in Cornwall, and many even elsewhere, should subscribe two guineas a year to the Society. It was the bounden duty of every mine in Devon and Cornwall to do so, the manager and purser of the subscribing mine to be members of the Society.

The Chairman was thanked for his presidency, and the meeting concluded.

THE DRILL TRIALS

The drill trials in connection with the Polytechnic Exhibition commenced on Wednesday, and were continued on Thursday, and will not be finally decided until Monday next, when the judge will consider all the details and make their awards. The conditions laid down were of a very complete character, and were strictly adhered to, though, especially on the first day, the great interest shown in the contest and the crowd that gathered caused considerable delay in carrying the details out. The rules were—1. Competitors will mount their machines on the box provided for the purpose.—2. Competitors shall bore in the same stone (*a*) one hole in a particular direction in one stone; (*b*) one hole at an angle of 45° in another stone.—2. Each competitor will be required to move the cylinder ends of his machine for the judges to measure the diameter of the cylinder; they will also measure the size of the borer before the boring commences.—4. Each machine will be required to bore a hole of a diameter equal to one-half the diameter of the machine.—5. After the boring the cubical contents cut will be measured by pouring water into the hole, or some other method.—6. The air used by each machine will be measured as well as the rock cut.—7. With a view to testing the utility of the machines the time will be noted from the time the boring commences to the end, including the time occupied in changing the borers.—8. The position of the holes in the rock will be marked by the committee, and numbered 1, 2, 3, 4, &c., and the ones to be bored by each machine, as well as the order of boring, will be divided by ballot.

Five machines entered—Stephens's, a new Cornish drill, the chief peculiarity of which lies in the cradle; the Excelsior, also shown in the county for the first time, the only working part in which, like the Darlington, is the piston; the well known Eclipse; the Cornish, and the Beaumont. On the first day, however, when the trial consisted of driving perpendicular holes in granite, the Beaumont did not complete its work, the tripod on which it stood being insufficiently weighted. The other four machines were worked from a bar. We give the particulars of the work done on the Wednesday:—

Stephens's—3½-in. cylinder, 1¼-in. borer, 26 in. in 8 min. 5 sec.; total revolutions of compressor, 642; mean pressure somewhat over 60.

Excelsior—3⅜-in. cylinder, 1⅜-in. borer, 27¼ in. in 10 min.; total revolutions of compressor, 730; pressure, 62.

Eclipse—2½-in. cylinder, 1¼-in. borer, 22½ in. in 5 min. 50 sec.; total revolutions, 330; pressure, 62½.

Cornish—3½-in. cylinder, 1⅜ and 1-16 borer, 28½ in. in 8 min. 21 sec.; total revolutions, 500; pressure, 61½.

The Eclipse gained heavily in time by not having to change borers, which, with the other machines, was responsible for a proportion of delay that may be indicated by the fact that 150 revolutions of the compressor were made while the change was being effected with the Excelsior. This may be taken as a fair average of the time really required. On the other hand, it will be noted that the hole bored by the Eclipse was much smaller than that of either of its competitors. The duty of reducing all such differences to a common standard falls upon the judges, and is no light one. However, they are all thoroughly practical men, and their decision will be awaited with much interest.

A most successful trial was made on Wednesday by Capt. Teague's mining ventilator. A model level was made on boards 20 ft. in length, 4 ft. high, and 1 ft. 9 in. wide. Powder was exploded in this, and by the operation of the ventilator it was thoroughly cleared in 1 min. 13 sec.

THE PATENT VENTILATOR OF CAPT. WILLIAM TEAGUE, JUN.

In connection with the recent patent obtained by Capt. William Teague, jun., of Carn Brea and Tincroft Mines, it will be of interest to our readers if we state what is at present being done with this valuable appliance at the latter mine, where a cross-cut is in process of driving from the Highburrow lode, at the 220, to cut Duncan's lode, which lies to the south. This cross-cut has at present obtained a length of 80 fms., and before the ventilating apparatus was brought into requisition was so hot that the men could not possibly work there; whilst the smoke from blasting a set of holes took a full "core" to clear. At present, however, ventilation is rapidly effected by Teague's apparatus. On Monday last the Government Inspector of Mines (Mr. Frecheville) and a party of gentlemen visited Tincroft Mine, where three holes were blasted at the end of the cross-cut. Almost instantaneously smoke was seen issuing from the exhaust pipe of the ventilator at the mouth of the cross-cut, and in the short space of six minutes the end was entirely clear from fume and smoke, so that the men were able to resume work. In fact, it would have been difficult to tell that blasting had so recently taken place. This invaluable apparatus can be applied for the mere cost of the piping, which, as it can be made of sheet iron, is very trifling. As the quantity of compressed air used passed through a nozzle perforated with 16 holes, each 1-24th of an inch in diameter, and as the air was only turned on for six minutes, it is manifest that the consumption of compressed air must have been very small—indeed, it was not observable on the pressure gauge attached to the receiver at surface. Our readers will probably have read that when dynamite is thoroughly exploded so that perfect combustion takes place (which by-the-bye, is very seldom), the products are carbonic acid and nitrogen —which of themselves are sufficiently deleterious and noxious gases, but when imperfect combustion or explosion takes place, as is generally the rule, carbonic oxide and nitrous oxide are formed in large quantities, and both of these are very deadly gases. The evil effect of these gases need not necessarily be immediately manifest, as there are many well authenticated cases in which men have met their death through inhaling these fumes, although the evil effect of so doing did not manifest itself until several hours afterwards. Such being the case, it is of vital importance that in every mine in the county where close ends are being driven with machine drills these ventilators should be applied. We should then hear less about the injurious results of dynamite smoke, which has, doubtless, had a great deal to do with the too-prevalent disease known as miner's consumption. In the report of her Majesty's Inspector of Mines for 1881 we observe that the Inspector has recommended the use of Teague's apparatus for clearing the ends of the noxious gases produced by blasting.—*Western Daily Mercury.*

METAL EXTRACTION WITH THE ELECTRIC FURNACE.

At the recent meeting of the British Association an interesting paper by Dr. C. W. Siemens, F.R.S., and Prof. A. K. Huntington, of King's College, London, was read, in which it was stated that since the publication of the description in June, 1880, it has been found advisable to surround the furnace with a coil. By this means the direction of the arc can be regulated at will, and the tendency which it has to fly to the sides of the crucible be checked. The furnace consists of a crucible of any convenient size, in the bottom of which is pierced a hole to receive the positive electrode, the negative electrode, which passes through a hole in the lid of the crucible, being suspended from one end of a beam, the other end of which is attached to a hollow cylinder of soft iron free to move vertically within a solenoid coil of wire. The force with which the cylinder is drawn into the coil can be counterpoised by a sliding weight on the beam. One end of the solenoid coil is connected with the positive, and the other with the negative pole. The coil having a high resistance, its attractive force on the cylinder is proportional to the electro-motive force between the electrodes, *i.e.*, to the resistance of the arc. The length of the arc is, therefore, regulated automatically. This is a point of great importance, as, were it not so, the resistance of the arc would rapidly diminish as the temperature of the atmosphere within the crucible increased, and the result would be that heat would be developed in the dynamo-machine. The extinction of the arc by sudden change in its resistance or by the sinking of the material in the crucible is thus also avoided. The crucible is surrounded with some infusible substance which is also a bad conductor of heat. Gas retort carbon or sand answers well for the purpose. The electrodes may be of such carbon as is used in electric lighting or of any other convenient conducting substance. They may, if desired, be cooled by circulating water through or round them, or by exposing them as far as possible to the air. For example, in one experiment a ½-in. nickel positive pole was employed, the lower end being inserted into a solid rod of copper about 1 in. square by 6 in. long. With this pole, no other means of keeping it cool being adopted, 1 lb. of grain nickel was fused in a clay crucible and poured in eight minutes, starting with all cold. The electrode was but little attacked, and no leakage occurred.

Two great advantages claimed for the electric furnace are that the temperature attainable is practically only limited by the refractoriness of materials of which the furnace is constructed, and that the heat is developed immediately in the material to be fused, instead of first having to pass through the containing vessel. The temperature to be obtained by the use of fuel is limited by dissociation. Deville has shown that carbonic acid undergoes dissociation at the ordinary atmospheric pressure at about 2600° Cent.—4700° Fahr. In the experiments made by the authors five D 2 machines driven by a Marshall's 12-horse power engine were employed; one being used as an exciter. The current ranged between 250 and 300 Ampères. The most refractory clay crucibles supplied by the Patent Plumbago Crucible Company were invariably cut through in a few minutes, and, except for experiments of short duration, were useless. Plumbago crucibles stood exceedingly well. Obviously, however, they could not be employed for all purposes, owing to their tendency to cause carburisation of the metal experimented with. In some experiments the fusion of metal was effected in a bed of lime, sand, or electric light carbon dust. The latter is a very bad conductor, and, as in the case of lime and sand, allows the arc when once formed to maintain a passage through it to the metal beneath.

With regard to the work done by the furnace it appears that 6 lbs. of wrought-iron were kept under the action of the arc for 20 minutes, and the metal then poured into a mould. It was found to be crystalline, and could not be forged. This is the result which has always been obtained when iron, nickel, or cobalt have been fused. Although the remedy—the addition of a little manganese just before pouring, is well known, the cause remains still unexplained. As much as 20 lbs. of steel files have been melted in one charge, the time required being about one hour, starting with the furnace hot. With such large quantities the metal has invariably been full of blow-holes. White iron, fused in a clay crucible for 30 minutes, when fractured did not appear to have undergone any change. White iron and coke were introduced into the furnace; the resultant metal was slightly grayer than the original. When, however, retort carbon was substituted for the coke a good gray iron, soft, and easily workable, was readily obtained in 15 minutes, starting with the crucible hot. On another occasion, starting all cold, at the end of 30 minutes the metal, although it had been well fused, had not been rendered grayer. The difference between these two results was possibly due to the temperature being somewhat higher in the one case than in the other. This is a point of considerable practical interest: 4 lbs. of white iron, fused with carbon dust for three-quarters of an hour, yielded a very gray crystalline iron. In another experiment, in which 8 ozs. of gray iron, produced in the electric furnace from white iron, were remelted in carbon dust for 10 minutes a very gray metal was obtained, from which on slow cooling a large quantity of graphite separated. Cast-iron, fused and kept under the action of the arc for 45 minutes in carbon dust, was not materially changed as to grayness, and the general character of the metal as to the way in which it worked under the tool was not materially altered.

The object of the experiment was to ascertain the maximum amount of carbon iron is capable of taking up under circumstances presumably the most favourable. The result is hardly that which would have been anticipated. Some of the same cast-iron was fused for 15 minutes under lime, which nearly covered it. The character of the fracture of the metal was but little altered by this treatment, when slight differences, due to the rate of cooling, are taken into account. A strong smell of phosphoretted hydrogen or of a phosphide was perceived—probably the latter. This was only observed in the experiment in which lime was used. The lime employed still retains a very offensive odour. When spiegeleisen was fused in a plumbago or a clay crucible graphite separated as the metal cooled. Siliceous pig-iron containing about 10 per cent. silicon was fused by itself, it showed but little change, except that some graphite separated. A similar result was obtained when 5 lbs. of the siliceous pig were fused for one hour carbon dust. On fracturing the ingot obtained, a large quantity of scales of graphite was found in a hollow which traversed nearly the whole length of the ingot at its centre. The fracture of the metal was still that so characteristic of highly siliceous iron, and was practically the same as that of the original pig-iron.

A series of experiments was made to determine the maximum amount of carbon pig-iron is capable of taking up in the presence of a given quantity of silicon. Gray cast-iron and pig-iron containing 10 per cent. of silicon were fused together in carbon dust, the ratio between them being varied so as to yield metal with from ¼ per cent. to 9 per cent. of silicon. A similar series was made, only substituting sulphur for silicon. No odour of sulphurous acid was perceived, therefore, presumably, no sulphur was volatilised. This is somewhat remarkable, considering the nature of the experiment. It was thought that investigations of this kind might have an important practical as well as more purely scientific interest; admitting, for the sake of argument, that any such distinction really exists, in assisting to determine the conditions in the blast furnace, &c. A positive pole of nickel cast malleable by Wiggin and Co.'s process, ½ in. in diameter, was passed through a hole in the bottom of a clay crucible. A carbon negative pole was used, but soon after the commencement of the experiment a deposit of nickel formed on the end of it, so that practically it was a nickel pole. This deposition of metal on the negative pole was also observed with some other metals, notably with tungsten. Whilst disclaiming any special knowledge on this point, Prof. Huntington suggested whether this phenomenon—which is reverse of that generally recognised as taking place—might not depend on the relative volatility of the matter composing the poles. In the furnace arranged as just described, 1 lb. of grain nickel was fused and poured in 8 minutes. The fused metal had a brilliant granular fracture. It could not be cut properly in the shaping machine, shearing off under the tool; 1 lb. of grained nickel fused in carbon dust for 25 minutes yielded a dark gray carburised metal, which worked well under the tool. On another occasion an equal quantity of nickel, similarly treated, gave a blowy metal, which could not be worked. Some carburised nickel, made as described above, was fused in a clay crucible for 12 minutes, and allowed to cool gradually in the furnace; the fracture became whiter, and the grain closer.

Copper, platinum, and tungsten were likewise treated. In the first case ¾ lb. of copper were fused for about half-an-hour in carbon dust. On examining the result, it was found that all but about ¾ oz. had been vapourised. Those who were present during the experiments suffered no ill effects from the atmosphere charged with copper which they must have breathed; 8 lbs. of platinum were rendered perfectly liquid in about a quarter of an hour; ¼ lb. of tungsten in powder was subjected to the action of the arc in a clay crucible. Dense fumes were evolved, a cavity about 1½ inches across the top being formed. The furnace was allowed to cool down slowly. When the crucible was removed, it was found to have been very much attacked below the point to which the arc extended. The inference is that the crucible had been attacked by the metal at the temperature of the experiment. The metal was fused only to an inappreciable depth beneath the cavity formed by the arc. The unfused metal underneath was covered with very beautiful iridescent crystals of tungsten, which under the microscope appeared to be well-formed prisms. They have not yet been measured. The crystals had evidently been formed by the slow cooling of the vapour distilled down from the surface.

A very large number of experiments was made with tungsten, the results of which showed that it could not be fused, except in very small quantities at a time. It was possible to build up a small ingot by fusing a little of the tungsten, and then adding little by little gradually. Even then the pieces obtained were for the most part spongy and unsatisfactory. The best results arrived at were when tungsten which had already been fused was employed in the building-up process. Once the metal had been fused, it did not fume much in melting, doubtless owing to the greatly reduced surface exposed. Tungsten fused in the electric furnace is, when untarnished, pure white, and brittle, the grain being very close. Tungsten hitherto has only been obtained as a gray powder, by reducing the oxide with carbon or hydrogen, or in minute globules in the ordinary small electric arc. Tungsten has its fusing point lowered by the addition to it of carbon. Under these conditions a solid piece of moderate size can without much difficulty be obtained. From 1000 grs. of

powder fused in carbon dust 650 grs. were recovered, the remrained having been volatilised, and from 450 grs. of the fused metal 410 grs. were obtained on re-fusion. One piece of tungsten which had bee ı cated under the conditions most likely to cause it to be highly carburised was analysed. It contained 1·8 per cent. of carbon. The metal was very white, close in grain, and brittle.

From these experiments the authors conclude that the amount of any given metal which can be successfully fused in the electric furnace, and the time required in effecting the fusion, are dependent on (1) the relation between the volatilising point and the fusing point—the extent to which the volatilising point is higher than the fusing point, (2) the conductivity of the metal for heat. It thus happens that platinum can be more readily melted than steel, and in greater quantity for a given expenditure of energy. This inference is believed by Prof. Huntington to be justified by the observations and experiments so far made. In the discussion which followed, Dr. SIEMENS remarked that the limit of the temperature producible by means of the electric furnace is as yet unknown, for although the heat would probably increase the resistance of the arc, that in itself would only cause a further development of heat. The results obtained with copper, though apparently pointing to a drawback in the use of the furnace for melting purposes, yet might prove of importance in dealing with metals in the vapourous condition. He could not agree with Prof. Huntington's suggestion as to the cause of the deposition of metal on the negative pole. He thought it was due to the negative pole being much cooler than the positive.—Dr. GLADSTONE enquired whether the deposit was crystalline or in fused globules?—Prof. HUNTINGTON replied that it was in the latter condition.—Mr. TERRILL (Swansea), remarked that the loss of copper by volatilisation in smelting was much greater than it was generally supposed. During an accidental escape of sulphuretted hydrogen in the works he had observed a thick deposit of sulphide of copper extending over a large area. He had detected copper deposited even on the zinc counter of the refreshment bar at the railway station some distance from the works. The discussion was continued by Mr. MAXWELL LYTE, Prof. VERNON HARCOURT, and the President, Prof. LIVEING, who thought that such experiments as had been made might be of great service in the study of metals.

FOREIGN MINING AND METALLURGY.

The condition of the Belgian coal trade continues excellent. Consumers appear anxious to lay in supplies, in anticipation of an early rise in prices, and the demand is so considerable that colliery proprietors experience difficulty in satisfying it. Stocks have been generally exhausted, and although the extraction is pushed forward with the utmost vigour, more than the present production could be easily disposed of. A winter of a more severe character is anticipated this year, although all conjectures on this head are necessarily vague and unreliable. The imports of coal into Belgium in the first seven months of this year are officially returned at 516,807 tons, as compared with 528,452 tons in the corresponding period of 1881. In these totals the supplies of coal received from England figured for 131,670 tons and 132,822 tons respectively. The exports of coal from Belgium in the first seven months of this year amounted to 2,276,113 tons, as compared with 2,249,406 tons in the corresponding period of the year 1881. In these totals the exports to France figured for 2,143,477 tons and 2,112,163 tons respectively. The exports of coke from Belgium in the first seven months of this year amounted to 622,978 tons, as compared with 524,002 tons in the corresponding period of 1881. In these totals the exports of coke to France figured for 531,600 tons and 436,222 tons respectively. An adjudication of 240,000 tons of briquettes required for the French State railways has just taken place. The tenders delivered presented some advance as compared with those received on the occasion of the last previous adjudication. The demand for coal has become more decided in Germany, and the the German coal markets present generally an excellent tone. The exports of coal from Germany in the first seven months of this year amounted to 4,210,000 tons, against 4,140,000 tons in the corresponding period of 1881.

There is scarcely any change to report in the French iron trade. Quotations have not varied at Paris, the price of merchants' iron remaining at 8*l.* per ton. Contracts for pig have been negociated easily at Longwy. In the course of last week it appears that business was done in nearly 80,000 tons. Towards the close of September contracts will be let on account of the French State Railways for 7700 tons of fish-plates and about 35,000 tons of other permanent way *materiel*. In connection with the great orders for steel rails for the French State Railways it appears that the last lot of 4850 tons has been given to the Terre Noire Works at 8*l.* 19s. 7d. per ton delivered free at Bastia and Ajaccio (Corsica). This lot was tendered for upon lower terms by an English house, but the offer of the English firm was not taken into consideration. We may now sum up the definitive results of the orders given out. The Steel Works Company of France has secured 35,532 tons, the Terre Noire Company 28,307 tons, the Creusot Company 26,484 tons, the Longwy Steel Works Company 20,379 tons, the Chatillon and Commentry Forges and Foundry Company 18,794 tons, the St. Chamond Forges Company 17,190 tons, the St. Nazaire Forges Company 16,462 tons, the Denain and Anzin Forges Company 15,300 tons, the Northern and Eastern Forges Company 11,175 tons, and the Firminy Steel Works Company 8779 tons. The Administration of Mines has just published some statistics illustrating the mineral and metallurgical production in France during the first half of this year. The production of the iron and steel works appears to be continually increasing, the augmentation established for the first half of 1882, as compared with the second half of 1881, being 47,676 tons of pig, 19,970 tons of iron, and 15,758 tons of steel. The production of steel rails in France in the first half of this year is returned at 161,687 tons, as compared with 151,984 tons in the second half of 1881. A Franco-Belgian company has purchased land at Don-Sainghin for the purpose of establishing rolling mills upon it. This step is a further development of metallurgical industry in the Nord and the Pas-de-Calais, and the promoters of the enterprise are relying, no doubt, upon the execution of the Canal du Nord, which will greatly cheapen communication with Paris and the centre of France.

There is no change to report in the general condition of the Belgian iron trade. The demand continues considerable and employment is general, although many affairs remain in suspense in consequence of the course of political events in Egypt. Prices have ruled very firm, but there have been no attempts at an advance at present. English pig has been quoted at Antwerp at 2*l.* 12s. per ton, while Belgian casting pig has been in request at 3*l.* per ton. Iron has remained at 5*l.* 8s. to 5*l.* 10s. per ton upon the Belgian markets. Plates have been in request at 7*l.* 12s. per ton; boiler plates have made 8*l.* 8s. per ton. An adjudication is pending for two large bridges in Portugal, involving an outlay of about 48,000*l.* Only two tenders have been submitted for these bridges, and these tenders emanate from Belgian firms. It is not known at present which has been the successful competitor. The imports of iron minerals into Belgium in the first seven months of this year amounted to 689,503 tons, as compared with 658,122 tons in the corresponding period of 1881. The exports of iron minerals from Belgium in the first seven months of this year were 193,313 tons, as compared with 203,408 tons in the corresponding period of 1881. The exports of iron minerals in the first seven months of this year were 12,231 tons, as compared with 18,854 tons in the corresponding period of 1881. The exports of plates in the first seven months of this year amounted to 23,078 tons, as compared with 19,951 tons in the corresponding period of 1881. The condition of the German iron trade appears to be satisfactory, orders flowing in, and the works in full employment.

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Cross-courses, or clay courses, are so called because they run counter to regular veins; thus if a copper lode runs about east and west a cross-course would be about north and south. These cross-courses are of more importance than is generally supposed, and lodes whether in granite or killas are never productive without them. It may be said, indeed, that all the great deposits of ore in Cornwall have been found in the vicinity of cross-courses. A lode may be driven up to a cross-course very rich, and then be split up, and some distance may have to be driven on the other side of it before getting to the rich ore again, owing to what frequently happens a "*heave*" of the lode. These clay cross-courses are non-conductors of heat, and the theory to which we called attention years ago in the Journal in regard to the formation of minerals was this—that strong electric currents passed along mineral veins, that these cross-courses interrupted these currents, and the minerals held in solution by the water were condensed and formed large bodies of ore against them. The great riches of Wheal Maria (Devon Consols) were found against a large cross-course, and they are generally the precursors of rich deposits. That water holds mineral largely in solution is equally well known. We have seen water pumped from Devon Consols clear as crystal, but depositing copper on old iron as it flowed over it. At Parys Mountain the water eats up the old iron, and forms copper precipitate. That clay is a non-conductor, we may mention a fact that we once heard the inventor of the steam-hammer assert if you pour molten iron from a furnace into an iron pot it will melt that pot. If you line the inside of the pot with clay, you may pour the molten liquid in, and hold your hands outside the pot without harm.

We are not surprised that there should be an outcry against the heavy call (7112*l.*) at South Frances, or that "A Shareholder," who purchased at high prices when large dividends were paid, is greatly disgusted. When these dividends were being paid, when shares were in consequence at a high price, we received information on which we could rely that the mine was really in a very bad state, that the dividends ought not to have been paid, and that a very large outlay would have to be made to put the mine right. The information furnished to us was accompanied by underground sections, and we were also informed that some of those in the possession of the real state of the mine had sold very largely if not all their interest. We published this in the Journal, and got all our friends out that we could, and we were very much abused for it, and our information was almost officially denied, but if our correspondent will refer to the *Mining Journal* of November, 1879, and read our remarks, he may see how correct they were, though we always wrote favourably of the mine itself. Our informant at that time wrote us after two inspections that it would take nearly five years to put the mine right, and now at about the end of three years we have this heavy call.

A correspondent calls our attention to the fact that East Caradon has also been affected by the fear of the stoppage of South Caradon, just as West Caradon has been, and that our remarks would also in a manner apply to that mine.

On Tuesday a telegram was received that the eastern heave of the lode in the 48, east of Wheal Crebor, had been cut, worth 20*l.* per fathom. This had been heaved by a cross-course.

The 132 east at Wheal Crebor has also improved, and is now 4 ft. wide, very promising for ore, which may come in any day. The other points in operation are valued in the aggregate at 150*l.* per fathom. There is no reason for the present depression in shares. The last sale of ore left a profit of more than 800*l.* We have not heard yet what the next sampling will be. The 48 east may open out a new mine in the eastern ground.

The sale of ore at D'Eresby Mountain (20 tons) realised 9*l.* 5s. per ton, or an advance on the price of last month.

Parys Copper has sampled 211 tons of copper ore, and sold 490 tons of ochre.

Morfa Du has sampled 40 tons of copper ore.

The 100 tons of ore sampled at West Caradon assays as follows:—51 tons 6½ per cent., 49 tons 12¼ per cent., and is estimated to produce over 600*l.* The 49 tons of rich ore is from Gilpin's lode, above the adit referred to in our last.

If a shareholder in Killifreth will again refer to our remarks in the Journal of the 2nd inst. he will find they were written 20 years ago, and were not even quoted in reference to Killifreth—in fact, the quotation had been written before we had even heard of the Killifreth dividends and the dealings in them. And then we spoke of these dealings as an evil, if persisted in, worse than that we had referred to as existing 20 years ago. In regard to the dividend, the Chairman stated at the meeting that it would be a mistaken policy to pay more than 5s., and remarking upon the proceedings, it was said in a Cornish paper that this dealing in dividends was "a modern practice of speculation which is evidently fraught with much evil to Cornish mining. Had not many dividends been sold previously for as much as 7s. 6d. per share there would have been no such a demand for a dividend of 6s. *to the injury of the interests of the mine and the genuine adventurers.*"

At New Cook's Kitchen there is a very rich copper lode in the 148, worth 8 tons of ore per fathom, and making a produce of 12 per cent.

A few weeks ago we called attention to Morfa Du, and stated that just as the mine was coming into good copper, and when probably a small outlay would bring it into a profitable state, its funds were exhausted, and that the directors had in vain asked the shareholders to take up the unissued shares at par. Since then a resolution has been passed authorising the issue of the 2382 shares at 10s. per share discount—that is, the 1*l.* fully-paid shares will be issued at 10s. *pro rata* to present holders; and, as we said before, any not taken up we shall be glad to secure for any friends that may desire them. The mine, when these are taken up, will be in 12,000 shares only of 1*l.* each, so that the capital is very small to pay dividends upon when made. Since the mine has been at work (upon a very small working capital) it has sold 3200 tons of blue stone for 6000*l.*, and has at present large reserves of it, and points in operation worth 14 tons per fathom. One winze is worth 3 tons of blue-stone (a conglomeration of copper, lead, zinc, silver, &c., &c., often in great demand, but just now rather slack) and 4 tons of copper ore per fathom. The mine has excellent machinery, and has at surface from 300 to 400 tons of blue-stone; the temporary lull in the demand for it having caused the temporary (we hope) difficulties of the company. The lode in Polrose shaft in saving work for tin all through, and rich strings of tin have been met with south of the lode in favourable ground.

PEARSON AND KNOWLES COAL AND IRON COMPANY.—In the annual report the directors say—The net profits for the year ending June 30 amount to 52,560*l.* 8s. 6d., and the balance brought forward from last account was 4383*l.* 13s. 8d., together 56,944*l.* 2s. 2d. An interim dividend amounting to 15,715*l.* 10s. was paid in March, and the directors now propose that the usual dividend at the rate of 6 per cent. per annum be declared on the A shares, and a dividend at the rate of 4 per cent. per annum on the B shares, both free of income-tax. This will leave a sum of 22,451*l.* 12s. 2d., out of which the directors recommend that 17,000*l.* be carried to the reserve fund, and the balance, 5451*l.* 12s. 2d., to the next account. The directors decided some time ago that it was desirable to sink a new shaft at the company's Moss Colliery. This is now nearly completed, and as the cost is being wholly borne by profits, provision is made for it by the proposed transfer to reserve fund."

An interim dividend of 1s. per share has been declared Copiapo Mining Company.

FOREIGN MINES.

CALIFORNIA GOLD.—Telegram from Mr. Alfred Rickard, dated Sept. 14: Mill run, second week, 178 tons; net value, $1500 (300*l.*); ore sales, $2000 (400*l.*)

CANADIAN COPPER AND SULPHUR.—Francis Bennetts, Sept. 1: At Hartford Mine, No. 5 shaft, the leading part of the vein in the 70 east is from 4 to 5 ft. wide of ores of 5 per cent. wet. In the 50 east the part of the vein we are carrying is rather poor for ores. In the rise above the back of the 40 east the leader is about 2 ft. wide of average ores. At No. 3 shaft the vein in the 10 west is about 18 in. wide, and in the 10 fm. level east about 2 ft. wide. At No. 1 shaft the vein in the 35 west is about 2 ft. wide of ores, and is improving. The stopes throughout the mine are looking well, and producing good quantities of ores. At St. Francis Mine the veins in the 30 north and the 30 south of the main shaft, are not looking so well as they were a short time since, but this may be only temporary, as the vein is changeable.

CAPE COPPER.—Capt. Henwood, July 31: OOKIEP: Nothing of value has yet been met with in the 105 fm. level, east of new shaft. No. 45 winze, sinking below the 92, is worth 1 ton of copper ore per fm. No. 46 winze, sinking below the 92, is still unproductive. The 92, north-east of No. 36 winze, has not undergone any change to notice since last report. The stope in back of the 92, north and south of No. 36 winze, is yielding 9 tons of copper ore per fm.; the one in back of the same level, north east of No. 28 winze, is worth 2 tons. The 68, east of north level, is worth 4 tons of copper ore per fathom. The 68, west of north level, is communicated to the large stope north of No. 19 winze. This level has laid open a good piece of stoping ground. We have resumed the driving of the 68 fm. levels north of No. 39 winze and north of new shaft, the former producing saving stuff; the latter is unproductive.

SPECTAKEL.—Capt. Henwood, July 25: The winze sinking below the 75 fm. level shows a slight improvement; the present bottom is worth about 1½ ton of copper ore per fm. The three drivings in the 75 fm. level are still unproductive. The stope in bottom of 64 fm. level, east from winze, produces 3 tons of copper ore per fathom. The stope in back of 64 fm. level maintains its value of 3½ tons of copper ore per fathom, and the stope in bottom of 53 fm. level is worth 3 tons.

TRIAL MINES.—Capt. Henwood, July 31: Communications have been made with the 40 fm. level west and winze sunk below the 25 fm. level; this has caused good ventilation. At this depth we have started to drive east, opposite this point to prove the ground in that direction. The 40 fm. level north from shaft is favourable for driving, and is letting out an increased quantity of water. Returns: For July, Ookiep, 1200 tons of 27 per cent.; Spectakel, 144 tons of 37 per cent.—Bills of Lading Received: 300 tons per Heather Bell, 828 tons per Esempio, 440 tons per Isabella, and 516 tons per Anne Besl.—Arrivals at Swansea: The Rosalie, Broughton, Powhattan, Tacna, Sea Foam, and Hondekeip.—Arrivals at Port Nolloth: The Marquis of Worcester, Illimani, and Golconda.

CHONTALES.—The directors have received advices from the manager, dated Aug. 5 last, who reports:—The Consuelo main level has been driven during the past month 24 ft. The ground is much the same as when I wrote last, but the lode, though hard, contains a little gold, and has now a stronger and more promising appearance than for some time past. As soon as the men are sufficiently in advance with the driving, I shall put up a rise in this part of the lode, which will likely not continue so hard when a few varas above the back, and I hope to make some good discovery, as well as to ventilate the mine. The cost at the mines for the month of July is 116*l.*

COLORADO UNITED.—Sept. 12: Advices from Mr. Ward, dated Aug. 26. Mine report for the week: Mining continued as usual. Winze in the bottom of the 11 level, down 28 ft., shows 4 in. of good ore. The 12 level stope is turning out about 3 in. of ore, the rise to the back of the level 2 in. of ore, and the drift same as last reported, 2 in. of ore. The 13 level drift lode is 2 ft. wide, carrying on an average 1 in. of good working ore. The concentration works ran well during the week. Ore sent away to Georgetown, 138 sacks zinc headings and 67 sacks cobbed ore. Mr. Ward informs the directors that the mine is looking well in nearly every part. He also says that he has great faith in the Oneida, or western part of the company's sett, than which, he says, he never saw better ground for the production of silver ore.

DON PEDRO.—Telegram from Rio, dated Sept. 9: Produce for the month of August, 550 oits.

EBERHARDT.—F. Drake: Statement of progress for week ending Aug. 19: Drift No. 1 (south) from 6000 ft. west, total distance, Aug. 12, 407 ft.; run for week ending Aug. 19, 13 ft.; total distance, Aug. 19, 420 ft.; run for month of August, 52 ft. Drift No. 2 (north) from 6000 ft. west, total distance, Aug. 12, 205 ft.; run for week ending Aug. 19, 10 ft.!; total distance, Aug 19, 215 ft.; run for month of August, 38 ft. Upraise from drift 2, total distance, Aug. 12, 126 ft.; run for week ending Aug. 19, 6 ft.; total distance, Aug. 19, 132 ft.; run for month of August, 16 ft. Drift 2 (north), from upraise, total distance, Aug. 12, 42 ft.; run for week ending Aug. 19, 7 ft.; total distance, Aug. 19, 49 ft.; run for month of August, 19 ft. Drift No. 1 (south): Advanced 13 ft.; has more quartz than for several months. The ground is firmer than any heretofore in the drift, and the rock is harder. At present the face of the drift is mainly quartz, showing favourably for ore. The ground in this driving has been quite variable, and it is impossible to foretell what changes we may meet with. In the upraise the wall continues its regular course strong and well defined, and showing no disturbance. The drift north from the upraise has the regular wall, and has also quartz; the ground is firm, but breaks fairly well. From the appearance of our drivings, we should soon open into ore.

ENGLISH-AUSTRALIAN GOLD.—The directors have received the following report under date, Fryerstown, July 31 last, from Mr. Pollard, the manager:—"Since the 17th inst. the 360 ft. level has been extended 8 ft., with about 3 ft. of stone on the footwall of the lode, and from 1 to 2 ft. thick on the western wall extended 14 ft. from the footwall of the lode in hard sandstone, where the stone is all but cut out; the stone is very poor. The rise in the back of the 320 has also been put up 14 ft., with 2 ft. of stone. I have not seen any gold in the stone from the rise. The 150 has been driven north 8 ft., and the western side of the block of stone above the drive has been stoped for 30 ft. in length; very good looking stone, but very poor. I am very much disappointed in writing the report of the mine during the past month, as the yield of gold has been very unsatisfactory. We have crushed 812 tons of stone during the past month; result, 55 ozs. retorted gold. This crushing came from nine different parts of the mine, but the largest quantity came from the 150 ft. level, which I mentioned in my last report, I thought payable, but the gold being very fine, it showed more gold on the copper plates than it has for the last 12 months; it proved to be all fine gold and not payable, so Mr. Clarke and myself consented to let the mine on tribute, and the men agreed to take the mine in four different pitches.

No. 1 consists of six men at the 140 ft. level engine-shaft, 200 ft. north and 100 ft. south of cross-cut. No. 2 party, of 12 men, at the 150 ft. level, west of prospecting shaft, north and south of cross-cut and the old backs. No. 3 party, of six men, at the 210 ft. level, east of prospecting shaft, and as far east as the lode, and 200 ft. north and south of the shaft. No. 4 party, of six men, from the 360 ft. level up to the 320 ft. level, 200 ft. south of the present end and 100 ft. north of the No. 1 rise. The men have commenced to work to-day. We are making some alterations in the pass at the battery for each party to crush their quartz separately. Mr. Clarke, the financial agent, reports, under same date, that after serious consideration he and Mr. Pollard had let the mine to several parties on tribute for six months, the free gold to be equally divided between the tributers and the company, but the latter are to have the pyrites and the gold obtained from the copper plates. The tributers will have to do a certain amount of dead work, and generally to work to the satisfaction of the manager. The tributers are to find their own powder, fuse, and candles, and the company all tools, surface labour, and engine-power. The expenditure for the four weeks ending July 31 was 435*l.* 2s. 10d.; the receipts from gold and pyrites sold was 303*l.* 0s. 6d. Loss on the four weeks, 132*l.* 2s. 4d. The colonial balance at the Bank of Victoria was 301*l.* 7s. 4d., and the liabilities were about 35*l.*

EUREKA (NEVADA) SILVER.—Report on mines for the week ended Aug. 21: Bald Eagle: The drift from the stope 150 ft. level has been advanced 10 ft. during the week in low grade ore and iron, intermixed with small bunches of good ore. We are drifting west from the stope, where the indications for ore are favourable.

ISABELLE GOLD AND SILVER.—The interim manager writes Aug. 21, as follows: Owing to the stoppage of the mill for one day (as per foreman's report), and running one of the agitators on settlings the following day, the melting of bullion is postponed until Wednesday. An assay of one average sample of the cement copper on hand, estimated at 8 tons, gives 88 per cent. copper. An assay of one average sample of second-class, obtained in washing first-class, estimated at 2 tons, 53 1-10th per cent. copper.—Mill Report: The running of the machinery was suspended for one day during the past week to enable the engineers to clean out the boilers and repack the valves. The furnace fires were maintained. Ore received during the week, 60,055 lbs. Charges drawn from the furnace, 30. While the machinery was stopped I employed the mill hands in cleaned out the settling tanks, and charged one of the agitators with the slimes or settlings. Everything is in good working order and tunning smoothly.

JAVALL.—G. C. Chambers: Extract from manager's letter, dated Aug. 5: I beg to hand you the following report of the past month's working:—Mine: The shallow level east of Tevdale shaft was driven 1 2-3rd varas; ground hard. The level west over Pim's Tunnel only progressed a few feet, the contractor having been called away upon legal business; the ground is the same as last reported. The level north of Pollock's Tunnel was down 17½ varas; the quartz here has a good appearance, and gives about 4 dwts. to the ton. I have now commenced to rise for stoping. The shallow level between San Pedro and Laken shafts is now being stoped; the quartz is very variable, sometimes showing stones with visible gold, and at others quite poor. The mine throughout is in excellent order for extracting quartz. There are now eight interior stopes in full working. As a rule they are all in very fair ground, but they are always liable to runs of poor stuff. This unfortunately happened last month with the south lode stopes, from whence we obtained the most quartz. Owing to the wet weather nearly all the work was concentrated in the interior of the mine, from whence we extracted 606½ cubic varas of stoped ground; from the manto workings we only took away 247½ cubic varas.—Esperanza Mine: From the sinking 186 cubic varas of quartz were taken to the mill; at this place we have still stuff sufficient to last for about two months, by which time the tunnel will have advanced some distance. As I informed you in my last, I have determined to drive the tunnel level with the Mill, and last month we progressed 6⅔ varas south-west. I intend thoroughly cutting through the lode to test its width and quality, and then run west on the most favourable quartz.

Mill Remittance: We have now ample water-power and the 30 stamps worked 25 days, but owing to the hardness of the quartz (nearly all mine quartz) only 1859 tons were put through, which yielded 407½ ozs. of gold, making an average of 4 dwts. 9 5th grs.; the total remittance, including Esperanza result, consists of 509 ozs. The whole of the mill is in its customary good order, and at the present moment 30 stamps are working well. The rainfall last month was over 18 in., and this month bids fair to be equally as wet.—Esperanza Mill: The 8 stamps worked 24½ days, crushing 385 tons of quartz, which yielded 101¾ ozs.—Receipts and Expenditure: The expenditure was 979*l.* 16s.; the remittance is valued at 132*l.*

KOHINOOR AND DONALDSON SILVER AND GOLD.—The superintendent's report on the Donaldson mine for the week ending Aug. 19 states: No. 1 level, in 198¼ ft.; lode looking better. No. 2 level, in 317¾ ft., yielding ¼ ton per fathom; favourable indications for improvement. No. 2 rise, up 77½ ft., yielding 1½ tons per fathom; strong lode. No. 2 winze, down 70 ft., yielding 1½ ton per fathom; strong lode. No. 3 level has been driven 64 ft., but the lode has not yet been cut. No. 4 level is in 118½ ft., yielding 1 ton per fathom; lode looking well. No. 100 level south from shaft in 154¾ ft.; lode looking better than last week. No. 200 level south from shaft in 18½ ft., yielding 1½ ton per fathom; lode strong. The resident director reports that Mr. Alfred Rickard was engaged in making a thorough examination of the mine, and taking measurements of all the ground driven, with a view of forwarding a report to the directors in a few days, and states that all work at the Donaldson is proceeding regularly and satisfactorily. The sinking of the Kohinoor shaft is also being steadily proceeded with.

NEW EMMA.—G. Cullins, Aug. 19: The shaft is now 21 ft. deep; rock very hard, but blasts well. Winze from Illinois Tunnel 18 ft. deep, showing seam about 4 in. wide of fair-grade ore.

NEW QUEBRADA.—Report for the month of July: Despatched to the coast for shiptment: Regulus from smelting works, 378 tons, 24·87 per cent. dry; ore from the mines, 2247 tons, 11·42 per cent. dry; total, 2625 tons. Forwarded from mines to smelting-works, 1453 tons, 5·84 per cent. dry. Home arrivals, 3472 tons; sales of ore, 823 tons, price per unit, 13s. 6d.; quantity afloat on July 31, 2888 tons; stock at the mines on July 31, 1510 tons; stock of ore and regulus on wharf at Tucacas on July 31, 4331 tons.

NORWAY COPPER.—A. F. Seccombe, Sept. 8: Extract from a report received from the company's manager at the mine: We have sunk the engine-shaft the required depth for the—— ft. level. Stoped down 10 ft. of the eastern end of the shaft to make it straight. Cut the top and trip-plats, and sunk the engine-shaft 4 fms. 3 ft. below the 140 ft. level. The lode has varied in value a little, but it is worth on an average 8*l.* per fathom for the part carried; it is looking very promising for an early improvement, which I expect within the next 2 fms., as the lode is now making a little flatter, and where it does that we always get more copper. The lode in the 140 ft. level, east of the engine-shaft, has improved, and is now worth for the part carried (6 ft.) 10*l.* per fathom. I may state that the lode cut through at the commencement of this level was 15 ft. The winze in bottom of the 116 ft. level, west of engine-shaft, has been holed to the 140; also a rise from the 116 west to the 72 ft. level, which has opened up some good stoping ground, besides giving the bottom of the mine good ventilation. The lode in this rise and winze has varied in value from 3*l.* to 14*l.* per fathom. The 116 ft. level west has been extended 7 fms. 1 ft. 6 in.; a lode worth on an average 7*l.* per fathom. The stope in the back of this level is worth for the length 6*l.* 10s. per fathom. The lode in the stope in back of the 72 ft. level, west of the engine-shaft, is worth 5*l.* per fathom. As soon as the 140 ft. level is extended a convenient distance east of the engine-shaft we shall drive a cross-cut north to cut the main lode, which we expect to reach within 13 fms. driving. This main lode to all appearances will prove to be of much more value than the Adelaide.

Gronskaret: This shaft is now down 10 fms. below surface; it is sunk on the south part of the lode, and at surface it is 18 ft. wide. The lode contains some very fine stones of copper, but not enough to value; but these show that the lode is productive, which, I believe, will be proved so before we get 30 fms. deeper. We shall next month set the men to cut through the lode to ascertain its size and value at this depth.—Surface: The dressing machinery is working very well, but the crusher being small and the engine not quite powerful enough, we are not able to dress very fast, but two additional machines and a little more power will enable us to do very much better. The incline road from the shaft to the dressing machinery is ready to lay on the rails, also from the dressing-floors to the sea. The timber is on the mine and up to the shaft for the new poppet heads, and will be fixed as soon as possible. The houses for the workmen are nearly completed, and some of them are occupied. These houses will contain six families and about 30 single men. We have also built a store-house, carpenters' and smiths' shop, and the large house for the stone-breaker, crusher, and dressing machines will be completed in nine or ten days. The foundations, &c., for the 60-horse power engine will be ready by the end of another week, when I hope it will arrive in Bergen. Judging from the present appearance of the mine, I consider you have a splendid future. At the same time it will take several months to open up the mine to show more fully its value, and with the aid of steam-power drills we shall be able to open up the mine very fast. These two massive lodes are close together, crossing and recrossing each other. Adelaide lode we have proved to maintain its size, and it is improving in richness to the depth of between 160 to 170 ft. This in my opinion speaks well for the future of these mines, and if the main lode at the depth of 140 ft. proves rich and maintains its size, no man could judge the value of your property. I have every reason to believe that this lode will prove to be much richer than Adelaide. It looks better. The copper is very rich, and the lode keeps its size for over two miles, which can be seen at surface.

OOREGUM GOLD.—There is no change in sinking the main shaft, fair progress is being made. In the 100 ft. cross-cut, east from this shaft, we have cut into the reef 12 ft., and see no footwall. The gangue consists of ferruginous quartz, mica, schist, and dolomite clays, the flookan of the lode, and we get a small show of gold from every washing. The reef is very porous, and lets out a great deal of water, which ought to be a good sign, "the more water the more gold." The battery is the only test for this reef if it is a paying one or not. At the underlay shaft the water is gone down 9 ft. during the last fortnight, thus showing that our reef at main shaft may be safely termed a reef, lode, or true fissure vein, and we are draining the continuous run of lodes to the Nundydroog Mine. In the underlay shaft we have still about 9 ft. of water to the bottom of the shaft. At the 120 cross-cut, east at Munday's, better progress is made in driving having got a better lot of coolies. In the air winze sinking below the 80 the lode is 3 ft. wide, with gold freely distributed through the solid quartz and in the matrix of the lode; this is a good productive lode. In the 60 cross-cut, east of No. 7 shaft, we have cut into some veins of quartz, and from washings we get small shows of fine gold. I purpose driving north and south, when I have no doubt the lode will get more defined.

PIERREFITTE.—Sept. 11: The manager reports:—We broke only 60 tons of ore at the south mine last week in consequence of our having been obliged to employ several of our miners to blast out rock which interferred with the working of the wagons for hauling up ore. We have yet a great quantity of ground to take away before we can work properly. From this 60 tons we have taken out 4½ tons hand picked lead and 5 tons of blende, and 7 tons of lead by the machines. There has been dressed about 4 tons of lead from the north mine ore. I hope to be able to report a much larger ore return for this week. On Saturday last I had a deep hole put in the other side, and when blasted it showed we have the lode apparently as good as on the part we are now working. Four miners go to work at this point to-day. Our horse-whim works perfectly well, and so soon as we have a little more space at the bottom of the winze, so that we can load the wagons easily, we shall be able to haul up by it a large quantity of ore daily. It rained heavily yesterday, so I expect we shall have water enough for our present purposes for this week. Machinery all working satisfactorily.

PITANGUI GOLD.—The directors are in receipt of a cable message from the agents of the company in Rio de Janeiro, dated the 11th inst., advising the amount of produce obtained for the month of August as being 800 oits. of gold. The value of this produce would amount, at 8s. 6d. per oitava, to 340*l.* sterling.

PORT PHILLIP AND COLONIAL GOLD.—July 29: Total quartz crushed for the month ending July 12, 2519 tons; total gold obtained, 544 ozs. 9 dwts.; average per ton, 4 dwts. 7 grs. Receipts (including 680*l.* 0s. 7d. obtained from tributers) 1544*l.* 1s. 11d. Payments (including 247*l.* 9s. paid for firewood), 1749*l.* 16s. 9d.; loss, 205*l.* 14s. 10d., which, deducted from the balance in hand, left an available balance of 835*l.* 4s. 10d., which was carried forward to next month's account.

POTOSI GOLD.—The resident manager, Aug. 7, writes: It is with much satisfaction that I can report a visible improvement in the quality of our ore and the steady running of our mill. The work on the new five stamps is progressing satisfactorily, and as there will be absolutely no extra expense in the cost of milling when these new stamps are at work, considerable advantage will be reaped by the enlarged crushing capacity of our mill.—Machinery: The old locomotive, Edith Helen, is doing all our work splendidly now, still I am anxious to receive the new bogie carriage for Potosi to guard against any break-down. The saw-mill is at work again getting out plenty of lumber for the different departments. All other machinery is running very satisfactorily.—Chile Mine: I enclose Capt. Hampton's report. Our mine is really well opened out, and if we had not met with the pinch in the vein, which runs from north-west to south-east, we could at this moment easily break from 100 to 130 tons per diem. As it is we have no difficulty in raising 60 tons a day. In the bottom of No. 1 shaft the lode is completely broken up, but we hope to get through this within a fortnight. The drift west of main shaft will serve to prove the vein just below the pinch, and we shall know shortly what we may expect from this part of the mine.—Peru Mine: The lode at bottom of Attwood's shaft is now over 3 ft. wide, and the quartz looks very well indeed although only little gold is visible to the naked eye, but the class of rock is extremely promising. The work generally is progressing slowly, still no time is being lost or wasted, and I endeavour to execute Mr. Fitzgerald's instructions as nearly as possible. Plenty of fine timber is already on the spot, and when we once get the saw-mills started we shall be able to get out the necessary timber very quickly.—Health: The health here is not very good now—there is a great deal of fever about; still our officers and myself have not suffered so far.

Capt. Hampton, Aug. 7: Main Shaft: A new track has been laid for the better working of the riddle, all the old bed plank being completely worn out, we are engaged driving a drift west of this shaft to prove the lode a greater depth This shaft will be 50 ft. deeper than the level above, west of this shaft, and all whole ground standing to the boundary. I hope to be able to report more fully on this point of operation during the next fortnight.—No. 1 shaft has been sunk during the past fortnight 12 ft. The lode continues to be very much broken up. We do not expect to find the lode well-defined until we reach 8 ft. or 10 ft. deeper. Judging from the dip of the pinch, as soon as this depth is being attained, we shall lose no time in driving a level back from this shaft to hole to the main shaft. This being done we shall sink the main shaft with all possible speed. The stope east of this shaft produces a large amount of quartz daily, the lode is 4 ft. wide, and has a good appearance. The hanging-wall in this stope has given us a little trouble, being very much broken, but no accident of any serious nature has occurred.—Air Shaft: The stope east of this shaft is just the same as it has been for some time. The lode is 8 ft. wide, and some good rock being obtained therefrom. No other change to notice throughout the mine.

RICHMOND CONSOLIDATED.—Telegram from mine at Eureka, Nevada: Week's run (one furnace), $23,000 from 530 tons of ore; refinery, $22,000.

— Samuel Longley, Aug. 21: I have to report the following advance and the present condition of the dead work for the week ending Aug. 21: The 200 west drift from near station has been run 11 ft. in limestone. The 300 south-west drift from station (Burleigh drill) has been run 12 ft. in limestone. The 300 south-east drift from south-west drift has been run 9 ft. in limestone (Burleigh drill). The 400 west drift from south drift to little No. 10 chamber has been run 12 ft. in limestone. The 800 west drift from north drift from quartzite (Burleigh drill) has been run 21 ft. in limestone. The 800 new north drift from quartzite drift (Burleigh drill) has been run 25 ft. in limestone. The 900 north drift (No. 2) from west drift has been run 26 ft. in limestone (Burleigh drill). The 900 east drift from north drift from west drift has been run 19 ft. in limestone (Burleigh drill). The 1050 drift station progressing satisfactorily in quartzite.

RIO GRANDE DO SUL.—Henry Eddy, Lavras-Bagé, July 29: Aurora Mine: No. 2 gallery, driving by four men, is now 7·3 metres west of shaft, having been driven during the week 1·9 metres. The lode is 2 ft. wide, and is getting so near the western shaft that it must necessarily improve in size and quality shortly: at present producing a little gold. No. 1 stope, by two men, produces 18 dwts. of gold per ton. No. 2, by one man, produces 15 dwts. Both the cross-cuts, each driven by one man, are without change. During the week we have commenced opening on the lode east of the No. 2 gallery cross-cut; it has a favourable appearance, and I anticipate opening up some payable ground there. The open workings are in the same condition as reported last week, but these at present are not important.—Deep Adit: We shall resume the driving of this in a fortnight more, when the two men who are now building a rough store-house for the reception of the quartz from the mine will have completed their work, and will then proceed with the drivage of this level without interruption.—Reduction Works: Quantity of quartz stamped for June, with produce, 9 tons (previously on hand during the building of the new axle in March) yielding 7 ozs., or as follows:—9 tons, as above, yield 220 grammes; June quartz (17 tons altogether) yield 432 grammes: total, 652 grammes. July quartz (Meza's lode), 2 tons yield 50 grammes; Aurora lode, 17 tons, 450 grammes: total, 500 grammes. Compared with June, the July produce has shown an increase of 2 tons of quartz and 68 grammes of gold. The average produce for the latter month (17 dwts. to to the ton) compares favourably with the results obtained before the temporary falling off. The 6-ft. water-wheel, put in to work the new amalgamators and shaking table, does its work very well. I shall shortly calcine a fair quantity of the pyrites, leaving the amalgamators, so as to test the efficiency of the latter, and will duly report.

RUBY AND DUNDERBERG.—Report on mines for week ended Aug. 20 Dunderberg: The main shaft continues in very hard rock, progress this week 8 ft; total 138 ft. below the 700 ft. level. Drifting was commenced to-day from the bottom of the shaft, and this will be known hereafter as the 800 ft. level. There is a slight improvement in the quality of the ore at this No. 8 orebody above the 700 ft. level. The west drift from the 700 ft. level has been advanced 10 ft. during the week. The north drift from No. 8 cave, 40 ft. below the 700 ft. level does not look quite so favourable for ore, the fissure has narrowed down to a few inches in width, consequently work has been suspended on this drift for the time being, and commenced in the south drift on the same fissure where the prospects are more favourable for ore. The stope at the end of the west cross-cut from the 600 ft. level is producing ore in paying quantities; no change since last report. The north branch of the 300 ft. west cross-cut has been advanced 12 ft. this week; total, 207 ft. from the point of connection with the outh branch. Have shipped 9 tons ore this week, and have 24 men and constractors, and eight tributers at work.—Home Ticket: The ore body near the surface continues without any change. Have shipped 10 tons ore this week and have about 15 tons at the mines ready for shipment; four men at work.

SARA CREEK (DUTCH GUIANA).—The directors of this company have received very promising advices from their local agents in Surinam. Besides the yield of rough nuggety gold despatched to them month by month during the present year, they have information that their mining manager (Mr. Hamlet) has discovered a stratum of quartz rocks containing specks of gold visible to the naked eye, which is encased in auriferous soil, and gradually widens as the opening of the lode progresses. The remittances of this company sold at various times since their general meeting in April last amount in the aggregate to between 7000 and 8000 grammes of gold.

SENTEIN.—M. Scantlebury, Sept. 1: The No. 5 end has been set to four men for the sum of 160 frs. per metre courant. The ground has b come harder, which is the only change to notice. In stope No. 2, below the No. 4 level, the lode is 10 ft. wide, and is now composed of gossan with spots of carbonate and blue lead throughout the entire width, producing 1¼ ton lead ore to the cubic fathom. Stopes No. 2, in back, has been set to 12 men for the sum of 120 frs. per cubic metre. The lode is from 10 to 17 ft. wide, and producing 15 cwts. of lead and 30 cwts. of blende ore per cubic fathom The lode in stopes No. 2, in back, is about 18 ft. wide, and worth 1 ton of lead and 1 ton of blende ores per cubic fathom. The lode in stopes No. 4, in back, is from 9 to 12 ft. wide, and worth 2 tons of lead and 3 tons of blende ores per cubic fathom; the hanging wall is so heavy and dangerous in these stopes, which impedes our progress very much. In the stopes in No. 2, below No. 3 level, the lode is 18 ft. wide, and worth 1 ton of lead and 1 ton of blende ores per cubic fathom. Before setting these stopes I deem it necessary to knock a hole through the No. 2 stopes, in back of No. 4 level, to facilitate the clearance of debris. This is set to the stopemen for the sum of 160 frs. per metre. There are not more than 3 metres to sink through before holing. Stopes No. 3, below, has been set to 12 men. The lode is 16 to 20 ft. wide, and worth 1½ ton of lead and 3½ tons of blende ores per cubic fathom. In No. 3 level, east of the stopes No. 1, in back, there has been nothing done since my last. In stopes No. 2, in back, the lode is from 8 to 12 ft. wide, and producing 1 ton of lead and 1 ton of blende ores per cubic fm. In No. 2 end the lode is very small, just a trace, showing a separation between the limestone and schist; the limestone is also intermixed with schist, altogether presenting a very unkindly appearance. For the present we have suspended the drivage of this end, and put the men to cross-cut the lode about 25 metres from the present end, where we passed through a little ore. To cross-cut the lode in the point mentioned we have set to four men for 225 frs. per metre courant. There has been raised during the past month 1176 tons of crude ores, 1376 had been sent to floors, and there are now broken at the mine about 600 tons. The output would have been greater had I not been obliged to employ several miners to cut away ground between the stations 2 and 3 of cable. We have also put in a great deal of timber during the past month. I hope to be able to increase the output for the present, but cannot be sure, as there is a difficulty in keeping a full staff of men this season. I am pleased to say the cable is working well

Report for August: Crude ore raised, 1176 tons of 1000 kilos.; ore sent to dressing-floors, 1376 tons of 1000 kilos.; ores dressed, 1136 tons of 1000 kilos.; raggings and tailings dressed, 200 tons of 1000 kilos.; market lead produced, 1st class, 90 tons of 1000 kilos, 2nd class, 15 tons of 1000 kilos.; blende ore produced, 140 tons of 1000 kilos.

SIERRA BUTTES GOLD.—Result of the working at the Serra Buttes and Plumas Eureka Mines for August: Sierra Buttes: Total receipts, $23,532; total working expenses, including $2640 spent on 9th level, $16,226.—Plumas Eureka: Total receipts, $33,087; total working expenses, $20,657.

STANDARD DIAMOND.—F. B. Salmons, Aug. 17: The statement of work done this week may be considered satisfactory. We are paying great attention to the washing being carried out effectually, and it is turning out well, as we are still washing blue ground and tailings together, and not putting much blue ground in the machines. We are hauling blue ground of the mine at a fair rate, and there is every prospect of our being able to get large quantities of blue ground out—in fact, the mine has never looked so well and had so little reef in it as at present. We have shipped to-day 3524½ carats diamonds. Week's report as follows:—Number of loads 16 cubic feet of reef hauled, 3085; number of loads 20 cubic feet of blue hauled, 3106; number of floor loads washed, 1628; 114 carats diamonds found in claims; 3222 carats diamonds found washing and breaking up. Total value of diamonds, about 5000*l.*: value of reef hauling, 578*l.* 8s. 9d. Total of wages' sheet, 1232*l.* 7s. 8d.

ST. JOHN DEL REY.—The directors have received the following telegram from Morro Velho, dated Rio de Janeiro, Sept. 9:—Produce for the month of August, 16,500 oitavas, value 8393*l.* Cuiaba, 440 tons seamped, yield 1·6 oitavas per ton.

TOCOPILLA COPPER.—S. Tredinnick, Aug. 3: Monthly Report: Carmelita Mine: No. 12 level, east of skip-shaft, has been driven during the month 10 m. 10 c.; the ground is worth ¼ ton per metre; reset at $11 per metre. We were obliged to suspend the driving of this end for a few days during the month in order that we might stop the foot of the level, which had risen for a considerable length; so much, indeed, as to impede the tramming. The lode is at present in a squeeze; this, we think, is a good indication of the end being very near the rich shoot. No. 11 level, east of skip-shaft, has been driven during the month 21 m. 50 c.; ground worth ¼ ton per metre; reset at $10 per metre. The lode in this level is composed principally of quartz, spotted with native copper. We only resumed the driving of the No. 10 east on the 1st inst., the run referred to in our previous report being much longer than anticipated. The end is now being pushed on with all speed. We have opened and secured the same level west of skip-shaft, and commenced to drive the end. The lode at this point has a very kindly appearance. The repairing of Jose's shaft below the 226 is progressing favourably. Since the communication was made between the lower and higher part of the mine the ventilation everywhere is greatly improved. We shall resume driving Nos. 14 and 13 levels east as soon as the new engine goes to work. The lode in both ends is strong and well defined, and worth ¼ ton of copper ore per metre. The tribute pitches throughout the mine maintain their yield satisfactorily.

Percance Mine: Skip shaft sinking below the 140: progress per month, 1 metre; reset at $25 per metre; the lode in bottom of shaft is 2 ft. wide, and the ground is hard and wet.—140 metre level east of Skip-shaft: progress for month, 12 metres; reset at per metre, $8; the lode in this level has undergone a great change since last reported, and has fallen off in value, but it still presents a kindly appearance.—Winze east of Skip-shaft: estimated present body of ground per metre, 1½; reset at per metre, $8; we have commenced sinking this winze below the 140 metre level since the 1st inst.; the lode is 2 ft. wide, and the ground easy for sinking.—Stope in back of 140 Metre Level: estimated present body of ground per metre, ¾; reset at per metre, $4; this stope has a little fallen off in value during the past month: 80 Metre Level, east of Skip-shaft: this is suspended for the time.—Deseada Mine: New Shaft: progress for the month, 7 metres; reset at per metre, $25; the sinking of this shaft is progressing favourably; the lode is 5 ft. wide, and yields occasional stones of coloured ore. All the tribute pitches in this mine are yielding fairly. The excavation of ground in the side of the mountain for the collar of the new shaft is nearly completed.—San Elena Mine: Progress for month: Cross-cut, 9 metres, reset at $15 per metre. The cross-cut is progressing satisfactorily, and we hope soon to intersect the south lode. During the past month we have not been able to accomplish much work in Percance and Deseada Mines, owing to the scarcity of men, but they have since been more plentiful.

VICTORINE GOLD.—Austin Reveille, Aug. 11: Extract from the New York Mining Record, Aug. 26:—The Victorine: The mill is shut down entirely at present in order to facilitate the work of changing the other 20 stamps of the batteries and arranging for working the whole together. The appliances for concentrating the ore and saving the sulphurets are also being arranged, and about next Thursday it is thought that everything will be completed and the mill ready to start into full operation, running the entire 30 stamps. The mine is at work situated about two miles further up Kingston canyon above the mill, and on the 1st of the present month it was reopened for the regular extraction of ore for milling. The main tunnel or adit is about 750 ft. in length. A force of men is opening out the ore breasts and placing the mine in proper condition for keeping the mill running steadily after it shall start. The Victorine mill and mine will constitute a locality of very busy interest before many days.

VICTORIA (LONDON) GOLD.—Advices have been received giving the result of the working of the South Clunes Mines as follows:—Total quartz crushed, 2520 tons; total gold obtained, 564 ozs. 19 dwts.; average per ton, 4 dwts. 11½ grs. Receipts, 1585*l.* 12s. 9d.; payments, 1498*l.* 8s. 3d.; profit, 87*l.* 4s. 6d.

YUBA RIVER GOLD WASHING.—Telegram received on Sept. 12: Clean-up, $14,395.

LARGEST NUGGET EVER FOUND IN RUSSIA.—In the Ural district has been discovered a nugget of gold weighing 44 lbs. English, the largest ever found in Russia.

PANULCILLO COPPER COMPANY.—The directors have declared an interim dividend of 6s. per share, or at the rate of 15 per cent. per annum, out of profits for the half-year ending June 30, leaving about 6000*l.* to be carried forward.

METAL MARKET AND EXCHANGE COMPANY.—The business of the Metal Exchange will be transferred from Lombard-court to the New Metal Exchange, Whittington Avenue, on Monday.

CENTRAL WYNAAD GOLD MINING COMPANY.—Mr Justice Day, acting as Vacation Judge for Mr. Justice Chitty, has fixed Sept. 21, at the Chambers of Vice-Chancellor Hall, Royal Courts of Justice, for the appointment of an official liquidator of the above company.

Mining Correspondence.

BRITISH MINES.

ANDERTON TIN.—W. J. Bowhay, Sept. 13: The deficiency of water a week ago threw us behind with our stamping and dressing, and when the late floods came they did some little damage, by bursting a part of the tail lobby of the wheel-pit and sending the water back upon the dressing-floors. I immediatly put on a strong force, and had the lobby cleared, and we were able, after the loss of two days, to resume our dressing again. We are now busy trying to pull up our lost time, and shall be ready for market with a good parcel of tin. We have, however, decided to defer our sale for a fortnight, especially as there seems a fair probability of the price of tin improving. The stope in the level is very good, and our lode throughout continues as rich as already reported, and driving west on the course of the lode it is yielding fine stones of tin. We are repairing our water-course, and all things are giving on well.

BEDFORD UNITED.—H. Trezise, Sept. 12: There is no change on the north lode.—M'Callan's Engine-Shaft, Bridge Lode: The shaftmen are making good progress in sinking; the lode in the shaft is looking promising, carrying a nice rib of rich grey ore, and it is giving out water freely. The 42 west is without change. In the 42 east the drivage is continued by the side of the lode, and the 30 east is being driven by the side of the lode. No. 1 stope is worth 23*l.* per fathom. No. 2 is worth 20*l.* per fathom. The lode in the winze below the 30 is 7 ft. wide, worth 18*l.* per fathom. The lode in the 20 east is without change.

BLUE HILLS.—S. Bennetts, R. Harris, Sept. 13: The lode in the Blue Burrow shaft below the 40 is without much change. In the 40 east end it is worth 7*l.* per fathom. In the 30 east end 3*l.* per fathom, and in the Gumpas adit, west end, 8*l.* per fathom. At Letcher's shaft the pitwork has been fixed to drain the 66, and the shaft tackle, &c., erected for hauling purposes.

BWLCH UNITED.—W. Northey, Sept. 13: Saturday last being our setting-day the following bargains were reset:—No. 1 stope, in the back of the 30, to four men, at 2*l.* 15s. per fathom. No. 2 stope, in the back of the 30, to six men, at 2*l.* 17s. per fathom. No. 3 stope, in the back of the 30, to six men, at 2*l.* 17s. 6d. per fathom; the lode has slightly improved in value, the total produce being 2 tons 10 cwts. of silver-lead ore per fathom. The 12 east under adit, to four men, at 4*l.* 17s. 6d. per fathom. I am pleased to state that an important discovery has just been made at this point, according to my anticipations, the lode being fully 2½ ft. wide, with branches of silver-lead ore 6 in. wide, almost solid, and the remainder composed of light blue killas, quartz, blende, copper, and lead ore, of a most encouraging character for opening out a section of valuable stoping ground. The cross-cut north at the 50 was reset to four men, at 8*l.* per fathom; for the past 4 ft. driving we met with a severe hard bar of ground, which has impeded our progress, and caused an extra price to be given, but we hope to pass through this channel of ground shortly, when better progress will be made. The stope in the back of the 50, to eight men, at 2*l.* 15s. per fathom; the lode will yield an average for the whole length of 1 ton 2 cwts. of silver-lead ore per fathom. In the 100 west the setting price is 5*l.* 15s. per fathom; this point requires no comment, as the lode has not been taken down for the past week. The stope in the back of the 15 under adit, on Marvin's lode, to four men, at 3*l.* per fathom; the lode is daily increasing in width, containing rich branches of silver-lead ore throughout: the average produce is about 12 cwts. per fathom. The machinery throughout the mine is in good order, and full work. Drawing and dressing carried on regularly. I am prepared to sample another parcel of lead ore.

— W. Northey, Sept. 13 (Later): The men have come up from underground. The 12 east has again improved, the lode being now 3 ft. wide, and is estimated to yield 1 ton per fathom; should this continue it is a mine in itself.

— J. Kendall, Sept. 4: I beg to submit you my report on the above mine:—Ritchie's engine-shaft is sunk in the south lode 112 fathoms below the adit level, but from this point to the 60 above no levels are extended west of the shaft on the course of the lode to prove its value, with the exception of the 100, which is extended east of the shaft 25 fathoms and west 3 fathoms. The lode in the drivage east and west of shaft is composed of quartz, carbonate of lime, and a small portion of blende, copper, and lead ore, and has the appearance of being near a deposit of lead. The lode in the west drivage is standing on the south side, and is compressed to about 1 ft. wide; I should advise this level to be driven west on this south lode with all possible speed, as it will form a junction with the north lode about 40 fathoms west of shaft, and when this point is reached will prove the value of two lodes, and also seeing that the south and north lodes produced large quantities of lead to the east, and that large deposits of mineral are often found at and near the junction of lodes, I am of opinion that in all probability good results will be met with here, and should this be the case it will be a most important feature, as the lodes are all standing intact west of the shaft from the 60 to the 100, and also below the latter level. The 50 is extended east of shaft 180 fms. on the lode; the first 19 fms. of the said drivage was found productive for lead ore, then 35 fms. proved unproductive, after which the lode was productive for 90 fathoms until it reached a slide or fault in the lode, but in the drivage east of the said slide the rock is disordered, and the part of the lode being driven on is small, and which I think is not the main part of the lode, but that it will be found to the north; this, however, will be proved by a cross-cut which is now being driven north, and should my supposition prove correct I believe that after the lode has been driven on east it will be productive similar to that taken away west of the slide.

In the 50, west of shaft, the lode in stope above the level is about 11 fms. in length, six of which will yield 12 to 15 cwts. of lead per fathom, and 5 fms. 35 cwt. of lead ore per fathom. In the 30, east of shaft, there are three stopes above the level about 20 fms. in length altogether—No. 1 yielding 8 cwts., No. 2 yielding 15 cwts., and No. 3 yielding 25 cwts. of lead ore per fathom. Also below these stopes there is stoping ground for 12 fms. in length, yielding about 15 cwts. of lead ore per fathom. The 12 is extended east of rise about 20 fms., the lode in the forebreast producing lead ore, and presenting a favourable appearance for improvement, such as to warrant the expectation of opening profitable stoping ground in this direction. I could not examine the lode in forebreast of the level, west of rise, owing to an accumulation in the level of lead ore from the stopes. There are six known lodes in this property, three of which have been very productive for silver and lead ore, and from which large profits have been made, but on the other three lodes very little has been done, only as follows—The one named Unexplored Lode, to which a cross-cut has been driven, and intersected the lode at the 40, but no levels are extended on its course to prove its value. On the new lode all that has been done is the sinking of a trial pit on it.

Marvin's lode is proved 15 fathoms below adit, and tramways and other necessary preparations are being made for extending the working on said lode and proving its value in depth. There is a stope in the back of the 15 said to be worth about 12 cwts. of lead ore per fathom; this being so, greater discoveries of lead ore may be expected when the lode is further developed. I am of opinion, judging from the prospects of further discoveries, and the present stopes continuing their present value, that an increased output of silver and lead ore may be expected, and which should realise a good price per ton, as I am informed the ore is of good quality, containing 16 to 17 ozs. of silver per ton of lead ore; and I would also remark that if the points mentioned in this report are worked energetically there is every reason to believe that in a short time large quantities of ore will be discovered, and would add that the mine can be worked at comparatively little expense, seeing that all the machinery for pumping and drawing, crushing the ore, and rendering same marketable, is worked by water power, of which there is an ample supply for all purposes.

CARNARVON COPPER.—W. Darby, J. Roberts, Sept. 12: In the sump below the 90 the lode in the western end continues poor, but we trust that after stoping away the poor neck of ground we shall be in good ore again. All other points throughout the mine are without change since reported last week. We have put the men from the 70 cross-cut, Garnon's, to clear out the 70 cross-cut at Cae-y-Groes, where several tons of copper was raised by the former company. We have been obliged to stop our pumping-wheel for 18 hours to put in a new crank-pin and repair ballast-bob.

CARNARVONSHIRE GREAT CONSOLS.—W. H. Borlase, Sept. 14: During the last week the lode in the 24, east of Endean's shaft, has fallen off considerably, but to-day it seems to be improving again. The lode is taking a very northernly bearing, and will, no doubt, continue so until it resumes its proper underlay. The present end is looking very promising, although at present only producing saving work for lead. The western end is in the influence of the cross-course, and is at present producing more ore than before, and looking promising for further improvement. The rise from the 14 and the winze from the adit are nearing each other as fast as the work will admit. The sinking of the winze is impeded a little by water, and the back of the rise is very droppy. I hope to have a hole through shortly. The lode in the stope east of Big Pass at the adit is producing 20 cwts. of lead per fathom. The lode in the diagonal shaft is improving a little, now producing for length of shaft 2½ tons of lead per fathom. The lode in the 14 end, west of this shaft, is also improving, and I think will soon resume its former valuation; lode now producing 10 cwts. of lead ore per fathom. The stope in back of this level is looking well, producing 2 tons of lead per fathom. The lode in the 8, west of diagonal shaft, is not looking so well, and is at present mixed with greenstone, worth 12 cwts. of lead per fathom. The stope in the back of this level is producing 20 cwts. of lead ore per fathom. In cutting into the hanging wall of the lode, west of footway shaft, to ascertain the sudden deviation of the lode, we have cut a large stream of water, and also a branch containing a little lead, sulphur, and spar. The men are now engaged stripping out the footwall of the lode where the lode has gone off, producing 20cwts. of lead per fathom. Since my last report I have sampled and sold 30 tons of ore, to Messrs. Walker, Parker, and Co., for 9*l.* 2s. 6d. per ton. We have only been able to crush one day for the last three weeks. We are consequently filled with stuff at surface, and must now suspend the winding of all ore until the crusher can make us some room. I am now leaving to ascertain if possible the whereabouts of the wheels.

CARN CAMBORNE.—W. C. Vivian, Sept. 13: In the 175, west of engine-shaft cross-cut, on the north lode, we have recently met with some good patches of copper ore, but the lode has not yet opened out to a large size. In the 95 west of sump, on the south lode, we have met with a horse of granite, dividing the lode into two branches. Each of these branches present the most favourable appearances, being composed of vughy quartz, chlorite, and rich yellow copper ore; they are also taking a direction towards each other, so that it seems probable they will at a few feet further west form a junction, cutting out the horse of granite now dividing them, which is about 2 ft. wide. In the 70, west of engine-shaft, where we are cross-cutting north, we have not yet cut the north lode. In the 40, west of engine-shaft cross-cut, we find a part of the large lode, which we have been driving through, striking off as a canter to the north-west. The canter offshoots yields rich blende with copper ore. We shall open out the north-west branch, and hope to find it will lead to a good discovery, between the present end and the cross-course, about 10 fms. ahead of it.

CATHEDRAL CONSOLS.—Stephen Davey, Stephen Davey, jun., Sept. 14: The lode in the engine-shaft is 3 ft. wide, and of the same promising appearance as when last reported. Good progress is being made in the sinking. All other points without change.

CORNWALL GREAT CONSOLS.—W. Doidge, Sept. 13: The lode in the 150 west is not quite so large as when last reported on, but its composition is much the same, still producing tin, but not sufficient as yet to save. It is a fine-looking killas in which the lode is embedded for the production of tin, and as the tin makes in floors we may now be driving close under and over a good lode, as was the case in the 25 west, where in driving the level we had scarcely any tin, but a good lode in stoping the backs. The 37 west is suspended.

CWM DWYFOR (Brynarian).—J. Davies, Sept. 14: Pensarn: We have driven the 20 north about 4 ft. this week. The lode retains its regular bearing and underlay, but is poor.

D'ERESBY MOUNTAIN.—J. Roberts, W. Sandoe, Sept. 13: We have nothing new to report at the end of this month. Things are looking much the same as we have reported them for the last two or three weeks. The rise in the roof is within 2 fms. of No. 5 proper, and the lode continues to look well worth for the whole width of the rise 3 tons per fathom; but we are leaving a large portion of the width of the lode to stand, which seems to be just of the same quality as what we are carrying, and so we can scarcely put a value on the whole of the lode. We have every reason to believe that this ore will continue, and the ground here may be whole for a great height, and on the south we are very sure that there is nothing but new ground. In order to get ventilation as well as other advantages for working this at the No. 5 proper we have commenced to drive a cross-cut at that level from the hanging to the heading on the south end of the old working, so as to keep clear of them altogether. We expect that we shall have about 5 or 6 fms. to drive to reach the top of the rise. The end driving south from the stope at No. 5 is still in a nice orey lode, worth about 1 ton of lead to the fathom; and the stope north of the rise is much of the same value as we have been reporting it through the month. At surface we are about to put down a tramway from the shaft to the dressing-floors, so as to facilitate the getting down the shaft, and save the expense of carting. We expect the new segments of the raff-wheel of the crusher will be here to-morrow, and we shall put them in directly. The ore sold yesterday we shall weigh off to-morrow. The prospects of the mine are better now than they were a month ago, and we shall not require so much time to get the next sampling as we have the last.

DEVON FRIENDSHIP.—F. R. W. Daw, Wm. Gill, Sept. 14: We have holed the rise put up in back of the 30 to the winze put down in the adit level, east of Bennett's shaft, and have put the men to drive both east and west to lay open ground for stoping. All the other points in the mine are looking well.—Surface Operations: We have finished repairing the calciner, and shall commence calcining to-morrow.

DEVON GREAT CONSOLS.—I. Richards, Sept. 14: Wheal Josiah: In the 144, east of the Count-house shaft, the lode is 6 ft. wide, composed principally of capel, with small quantities of copper and mundic ores interspersed.—Wheal Emma, Inclined Shaft: In the cross-cut, north at the 137 east, east of Friend's cross-cut, the lode has been intersected and cut into about 1 ft., and for this distance it presents a very promising appearance, being composed of capel, fluor, peach, mundic, and some copper ore of good quality.—New Shaft, New South Lode: In the cross-cut, north at the 115 east, judging from the appearance of the ground, the north wall of the lode has been reached, we shall, however, extend the cross-cut a short distance further, and if no other portion of lode is met with, driving east on the most promising part of the lode, which is altogether 9 ft. wide, will be commenced.—Railway Shaft: In the 190, west on the south part of the lode, the lode is 7 ft. wide of a most promising character, and worth 1 ton of copper ore and 2 tons of mundic per fathom. In the 160 west the lode is 3 ft. wide, yielding some good quality arsenical mundic, and a little copper ore.—Watson's: In the engine-shaft, sinking below the 88, the ground is not quite so favourable for progress as it has been. In the western shaft, sinking below the 20, the ground is favourable for progress and congenial for mineral. In the 20, east of the western shaft, the lode is 4 feet wide, composed of capel, quartz, mundic, and some copper ore of good quality.

DEVON GREAT UNITED.—Isaac Richards, Sept. 14: In the 120, east and west of Willeaford's shaft, the lode is without alteration, yielding arsenical mundic and a little good quality copper ore. In the 60, west of Watson's shaft, on the Capel Tor lode, the lode is 1½ ft. wide, composed of capel, quartz, mundic, and a little copper ore. In the 60, west of Watson's shaft, on middle lode, the lode is 1½ ft. wide, composed of capel, quartz, peach, mundic, and some good quality copper ore. The men are getting on very satisfactorily with working the rock drills, and greater speed in driving is being attained. The machinery throughout is in good condition and working well.

DRAKEWALLS UNITED.—Moses Bawden, Sept. 14: We sold on the 8th inst., at Truro, 9 tons 19 cwts. 1 qr. 22 lbs. of black tin, at 61*l.* 17s. 6d. per ton, realising 617*l.* 0s. 9d. Mathew's shaft is again secured, and we are enabled to go on with the dressing of tinstuff through this shaft, as we were doing before the tremendous run took place some few weeks since, and we consider that we need apprehend no further danger, and we hope soon to be in a position to keep our steam stamps more fully at work, when we have no doubt the results will be satisfactory to the shareholders. Our monthly setting will be on Saturday next, and in our following report we will give detailed particulars of the work in hand. We have no alteration to report in the points of operation. The pitches and stopes are yielding a fair quantity of stuff for the stamps.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, Sept. 13: The lode in the 50 east end is 1 ft. wide, containing a small but good leader of tinstuff, worth 6*l.* per fathom. In the 40 east end the lode is again opening out in width, is now 1 ft. wide, and worth 3*l.* to 4*l.* per fathom.

EAST CHIVERTON.—R. Southey, Sept. 14: Since my last report there is no change to notice, in the 100 end west of the engine-shaft the lode is about the same size and value; the end is being pushed forward by six men at 4*l.* 15s. per fathom. In the rise just behind this end good progress is being made, lode worth about ½ ton of silver-lead per fathom; when the rise is communicated to the 90 it will give good ventilation (which is very much needed) for prosecuting the bottom of the mine. The lode in the 100 end east is just the same as when last reported on. Stopes in the back of the 90 are yielding very rich silver-lead. At surface the engineers are busily engaged about the new steam-whim, and next week the masons will commence to build in the beds of the boiler.

EAST LONG RAKE.—H. B. Vercoe: There is no change whatever in the 50 east since my last report, the lode producing occasional lumps of ore. In the stope in roof of the 50 west we are clearing the "sludge" deposited in the large cavity referred to in my last report; in doing so we meet with fine lumps of ore, and I believe when we are ready to commence exploring it, which we shall do in two or three days, that much better ore will be found than we have had for some time past. The lode in the sump, in the sole of the 50 west, produces 15 cwts. of lead per fm. We sell a parcel of ore at the Holywell Ticketing this day, particulars of which shall be sent you per to-night's post.

EAST ROMAN GRAVELS.—Arthur Waters, Sep. 14: The lode in the rise in 97 south is 6 ft. wide, composed of carbonate of lime and lead ore, but at present not to value. The stope in bottom of the 86, north of new winze, is in a lode 4 ft. wide, worth about ¾ ton per fathom. The stope south of this winze is in a lode 6 ft. wide and worth 1 ton per fathom. The stope close to the old winze on said level is also worth 1 ton per fathom. There is no change worthy of notice in either the winze or stope south of the old winze in the 86 since last reported.

EAST TREGEMBO.—Edward Chegwin, Sept. 13: Adit end driving north-west of Derrick shaft on Ten o'clock lode the lode is 18 in wide, and from two samples I have had carefully assayed did 42 lbs. of tin to a ton of stuff; therefore, worth 5*l.* per fathom. This tinstuff we are saving, and can be sold at any time. We are driving this end by four men, at 75s. per fathom instead of 80s., as given last month, when we did 4 fms. 2 ft. 6 in. Judging from the present appearance of this end I feel we have something very good a short distance in front of us.

EAST WHEAL ROSE.—W. Skewis, T. Doidge, Sept. 11: Penrose's shaft is drained 8 fms. 4 ft. below the 20. This is very satisfactory, and a faster forking of the mine than ever we anticipated even if the both engines had been at work, and at present we see no reason why this speed of forking should not continue. Therefore, we expect to have the 30 dry by Monday next, if not before. The 20 is cleared south from Foster's shaft to the east and west lode, and we are now preparing to clear east and west on the east and west lode. This level is also cleared 20 fms. north from Foster's shaft towards Penrose's, and the clearing will be continued with all speed for the purpose of ventilation. As soon as this level and the 30 are sufficiently cleared we shall then determine at what point it is best to drive a cross-cut to reach Middleton's lode.—The 10 fm. Level: Here we are glad to say we have within the last day or two found Innes' lode on the north side of the east and west lode, and east of Foster's shaft. The lode in the end is over 2 ft. wide, composed of quartz, prian, and silver-lead, altogether a splendid looking lode, and worth for silver-lead fully 2 tons per fathom. Looking at the good discoveries already made in the adit on Innes' lode, together with this now met with in the 10, we are greatly encouraged to believe that as the 10, 20, and 30 are cleared much more extensive and richer discoveries will quickly be made. All other underground operations in this part of the mine are progressing in their usual way. The ground for the foundation of the winding engine-house is all taken out, and the masons will commence building in a day or two. The dressing of both lead and blende is still progressing, and we shall soon have parcels ready for the market. At North Wheal the men are busily engaged in lifting in the 100 in. engine, the engine-shaft is cleared 13 fms., and we find the timber to be in first-class condition as we go down. This is also the case so far as we have gone down Purser's shaft. We still believe, as we before said, that these shafts will be found to be in a good condition to the bottom of the mine, and this good condition, and the great speed being made in forking the water with one engine only, is a clear proof that the draining and clearing of this mine is nothing near so great as many people tried to make it appear; and when the bottom of the mine is reached the large quantities of lead ores which will be obtained will be even more surprising to the outside public than the speed with which the water is being forked.

GAWTON.—G. Rowe, G. Rowe, jun., Sept. 9: The lode in the 117 end east is 5 ft. wide, yielding 12 tons of mundic and copper ore per fathom. The lode in No. 1 stope in the back of this level is producing 3 tons of mundic ore per fm. No. 2 stope in the back of the same level (117) is yielding 20 tons of mundic and ore per fathom. The lode in the 105 end east is producing 4 tons of mundic per fathom. The lode in the rise in the back of this level (105) is worth 12 tons of mundic and ore per fathom. The lode in the 70 end, east of cross-cut, is producing 13 tons of mundic per fathom. The lode in the stopes both east and west of cross-cut is yielding 10 tons of mundic per fathom. We have shipped 50 tons of arsenic soot, and have in store for the next cargo about 25 tons more, and shall have above 200 tons of burnt copper ore ready for the next sampling.

GOODEVERE.—R. Knott, Sept. 13: In the higher shaft in the bottom end east the lode has a kindly appearance, producing a little tin, but at present not enough to value. In the stope in the bottom of the drivage west the lode is fully 2½ ft. wide, and continues to produce good stamping work. At the new shaft the ground is favourable for progress, and the men will in all probability complete their bargain by the time referred to in my last. The rails for the tramway from shallow adit to stamps will be all on the mine this evening, and I hope to connect the stamps again in the early part of next week.

GODDARD'S LEAD.—R. H. Vivian, Sept. 14: Since my last advice we have been carrying a deeper stope than hitherto, consequently we have got into a much better lode, such as we have in the shaft, plainly showing that as we go deeper the lode increases in value—that is to say, we have more lead and less blende.

GREAT LAXEY.—W. H. Rowe, Sept. 13: Since the beginning of this month the Welsh shaftmen have been engaged preparing to fix a standing-lift of pumps from the 235 to the 259, cistern for which is made, necessary ground cut and bearers in position a few feet below the last-named level. There is consequently some little interruption to the sinking, but all will be completed in a few days, and the shaft again in regular working order. We shall then be also in a position to direct attention to the trial of the ground south by driving the 259 in that direction, the result of which will determine the question of the resumption of the sinking of the main engine-shaft below the 235. You are aware that this section of ground has been worked to a considerable extent above and below the 210, but the 235 for almost the entire distance between these two shafts is poor, except at and south of the engine shaft. The 259, however, being so much deeper, may prove a very different and improved state of things, and the two-fold object of this driving leaves no question as to the desirability of proceeding with it. There is no change of importance to report in either of the deep ends driving north or of the others working in the deep mine. We have commenced to sink a winze in the 220 in advance of the 235 end, worth 30*l.* per fathom, and also resumed working by a stronger staff of men a rather extensive piece of ground in sole of the 165 south of engine-shaft; worth at present 20*l.* per fathom.—Dumbell's: A strong slide has disturbed the lode in the 230 end north, and the cross-cut now being driven eastward has not yet overtaken it. No. 1 stope is worth 35*l.* and No. 2 40*l.* per fathom. The 215 end is just now comparatively poor, but the lode is again becoming stronger, and offering to improve. The two new stopes in the roof are worth respectively 40*l.* and 45*l.* per fathom, and the latter is the present value of the 209 end north. The lode in the 85 end north continues small, with a rather rapid underlie; it carries a leader of spar with a little blende and sometimes lead ore. We cannot do better in my opinion than continue the driving for the present, and cross-cut the ground thoroughly further north. This end is now about 55 fms. short of being under the north shaft. The lode in the 60 end north has not yet recovered its value before meeting with the small slide, being almost entirely composed of blende with very little lead in the present end. It is very good going back south of cross-cut, and I think sufficient is now seen at this level to justify our taking up the 37 at Agmach shaft, and attaching this run of ore from that point at once.

GREAT WEST CHIVERTON.—J. Curtis, Sept. 13: The men are now repairing the shaft in preparation for the portable engines, and are also cross-cutting the bottom to see if there is not another lode near the present workings. The portable engine will be got ready as fast as possible.

GREEN HURTH.—J. Polglase, Sept. 7: The bottom end men are putting a rise through to the 30 for ventilation; vein worth 3 tons per fathom. The stope, north of Vipond's sump, in the back of the bottom level, is worth 4 tons of ore per fathom. The stope, south of Vipond's sump, in back of the bottom level, is worth 1 ton per fathom. The sump in bottom level is worth 2½ tons per fm. No. 3 stope in back of the 30 is worth 8 cwts. per fathom. No. 4 stope in back of the 30 is worth 2 tons per fathom. The rise in the back of the 31 is without change. No. 4 vein is still in disordered ground. To-morrow being measuring day I will hand you the value of the vein and depth sunk in Swan shaft. Dressing going on as usual.

HEALEYFIELD.—J. Trelease, Sept. 7: I beg to hand you the following report. We still continue the drivage on the top of the rise in the back of incline. The lode continues much the same as last reported. In the foremost sump south the water has rather increased the past week, which somewhat impedes our progress in sinking. We are now down 50 ft. at this sump. It will take 15 ft. more to reach the Success level. Jose's stope has somewhat improved during the last few days; now worth 12 cwts. of lead to the fathom. Foster's stope in the back of middle level is worth 15 cwts. of lead ore to the fathom. Our pitches, taking them altogether, are yielding about the same as reported last We have cleared about 10 fms. of the Success level the past fortnight, and I have now two men clearing the old winze from the Success level to the bottom level; it is well filled with deads. When we reach the bottom level we shall then clear it northward to the old air shaft for the ventilation of the mine.—Surface Operations: The walling of the engine-shaft is vigorously pushed forward. We have got in the foundation of the wall on the sill, and will start taking out another set of frame timbers at once above the masonry. We have sampled this last week 25 tons of ore.

HINGSTON DOWN.—Thos. Richards, Sept. 13: The engine-shaft has been sunk, by nine men, during the past week 2 ft. 4 in.; total depth below the 25, 9 fms. 3 ft. 6 in. We have had the misfortune to break the wind-bore of the sinking-lift, which will cause a little delay. It shall be replaced by a new one as early as possible. The 25 east, by six men, has been driven 3 ft. 9 in.; total distance from the shaft, 26 fms. 1 ft. 9 in. The lode is composed of quartz, capel, and mundic, with some rich copper ore intermixed, and is very promising. The cross-cut at the 25, east of the shaft, towards the No. 2 lode, by four men, has been extended 3 ft. 6 in. in favourable ground. The 12 east, by four men, has been extended 2 ft. 6 in.; total distance from the shaft, 87 fms. 1 ft. 2 in. The lode continues without any material change, being composed of capel, quartz, mundic, and a little copper ore. The deep adit cross-cut, by four men, has been extended 3 ft. 9 in.; total distance south of No. 2 lode, 26 fms. 1 ft. 7 in., and fair progress is being made.

KIT HILL GREAT CONSOLS.—Isaac Richards, Sept. 14: At the tunnel level our progress during the past week has been more favourable, 3 fms. 2 ft. having been driven, making the distance during the month 10 fms., and the total distance driven 98 fms. 3 ft. The ground continues of a favourable character, and we hope to have no further hindrances in consequence of water. The north engine-shaft having reached the depth of 15 fms. 2 ft. 4 in. below the 62, another level—the 75—will at once be commenced westward, and as soon as practicable the skip-road will be continued down from the 62 to the present bottom for the more speedy and economical getting away of the stuff, after which drivages both east and west at the 75 will be pushed on with all possible speed. The lode in Griffin's winze, sinking below the 62 west, is from 4 to 5 ft. wide, composed of capel and peach, with a small quantity of tin ore. In the 62 east the lode is 3 ft. wide, of a very promising character, and yielding some good quality tin ore. In the 48 west the lode is 3 ft. wide, composed of capel, quartz, mundic, wolfram, and a little copper ore. In the 48 east the lode is 5 ft. wide, of a most promising character, and yields a small quantity of tin ore. In Fox's winze, sinking below the 36 west, the lode is 4 ft. wide, composed of capel and quartz, with mundic, wolfram, and a little tin ore.

LANGFORD.—R. Goldsworthy, Sept. 13: I am pleased to inform you the water is now drained 10 ft. below the 20. We have had to put in timber to secure the back of the plat and side of the shaft. This is now finished, and ground cut for the cistern, which will be sent down and put in its place to-night, and to-morrow if the other castings come in this evening (which have been promised) we shall at once commence to bring up standing lift. I hope to get this completed in a few days.

LEADHILLS.—A. Waters, Sept. 14: Brow vein, Gripp's adit, north of Glengonar shaft, shows a lode 4 ft. wide, charged with nice-looking white quartz with bits of ore, but not in quantities to value. The pitch in the back of the 30, south of shaft, by two men, at 90s. per ton; worth 15 cwts. per fathom. Hopeful vein pitch in the back of Gripp's adit, north of the above shaft, by four men, at 90s. per ton; worth quite 15 cwts, per fathom. George's Roust Vein, Gripp's adit, going north of Muir's cross-cut, is still in hard ground, and a narrow lode.—Brown's Mine: The 100, going south of Jeffrey's engine-shaft, is opening out a lode 5 ft. wide; worth 2 tons of rich lead ore per fathom. The 85 south is also in a lode 5 ft. wide; worth 20 cwts. per fathom. The 85 north shows a strong lode, but at present not enough to value. Watson's winze going down in the 70, south of 85 end, is in a lode 4½ ft. wide; worth 2½ tons per fathom. The 70 south is in a lode 3½ ft. wide, composed principally of quartz, but we think in about 10 fms. further driving the dip of Wilson's run of ore ground will be reached. The stope in this level north of the rise is worth 5½ tons per fathom. The stope in same run of iron ore in back of the 50, north of Grierson's winze, is worth 6 tons per fathom. Wilson's shaft, below the 41, is in a lode about 10 ft. wide; worth 8 tons per fathom. The drift below the 41, north of Wilson's winze, shows a lode 4 ft. wide; worth 2½ tons per fathom. The stope in the back of the 41, north of winze, is worth 4 tons per fathom. Stope in same level, south of Brown's winze, is worth 5 tons per fathom. The winze below the 30, north of Wilson's shaft, is worth 9 tons per fathom. The stope below the 20, north of Cameron's winze, is worth 25 cwts. per fathom. Stope in the back of the 10, south of Moffatt's winze, is worth 2 tons per fathom. Gripp's adit going south of Dobie's junction, south of Wilson's is in a soft lode 6 ft. wide yielding stones of ore.—Raik Vein: The stope below Gripp's level, north of Watson's shaft, is worth 3 tons of lead ore per fathom.—Jeffrey's Vein: The 20 going north-west of Raik vein junction shows a promising lode, but it is at present not to value. The stope in roof of the 10 is worth 25 cwts. per fathom. The pitch in the back of Gripp's adit, by two men, at 80s. per ton, is worth 15 cwts. per fathom. Surface work going on regularly and well. Tramroad, Wilson's shaft to Read's dressing-floors, in good order, and is a great improvement upon the old system of delivering the stuff from Brown's Mine to the crusher, and so forth. We shall now pay close attention to the putting up of additional slime dressing machinery, so as to keep ahead with the times.

LLANDEGLA.—H. Hotchkiss, Sept. 13: Whim-Shaft: The ground in the cross-cut south of this shaft is favourable for driving, and progress therein is good.—New Shaft: There is no change in the character of the rock or the lode; the latter is well defined, and contains a dark, soft sticking, intermixed with spar—a very kindly-looking lode, considering it is in the heart of the grit formation. The sinking of this shaft is going on with the greatest regularity.

MELLANEAR.—John Gilbert, Sept. 13: The ground in the 30 cross-cut, driving south of Gundry's shaft, continues very promising in appearance, and is much easier for driving. There is no change in the 70 cross-cut north of the main lode, east of Gundry's shaft, since last report, but the ground is still mineralised, and we are expecting to meet with the lode very soon. The lode in the 90, driving west of shaft, on south part, is 5 ft. wide, yielding 3 tons of ore per fathom, and the ground is favourable for driving. In the 110, driving east of shaft, on main lode, the lode is 6 ft. wide, yielding 2 tons of ore per fathom, and letting out a little more water. In the 110, driving west of shaft, on south part, the lode is 4 ft. wide, and yielding 1 ton of ore per fathom, and looking more kindly. The lode in the 120, driving east of shaft, on main part, is 5 ft. wide, and yielding 1½ ton of ore per fathom, and judging from the level above it ought very soon to improve. The lode in the winze in the bottom of the 90, west of shaft, is 6 ft. wide, and yielding 3 tons of ore per fathom. In the winze in bottom of 100, east of shaft, the lode is 5 ft. wide, and yielding 1½ ton of ore per fathom. In the rise in back of the 100, west of shaft, the lode is 6 ft. wide, and yielding some saving work for copper ore. The lode in the rise in back of the 120, at Gundry's shaft, is 4 ft. wide, and yielding 2 tons of ore per fathom. The lode in the 90, driving east from old engine-shaft, is 4 ft. wide, and yielding ½ ton of copper ore per fathom, and looking very promising. In the 110, driving west from old engine-shaft, the lode is 2 ft. wide, and yielding a little tin, but not sufficient to value. In the 110, driving east from same shaft, the lode is 2½ ft. wide, and yielding some saving work for tin.

MID-DEVON COPPER.—James Neill, Sept. 9: A Shaft: Water in fork to bottom of 80. Machinery working slowly and doing good duty.—C Shaft: The stope in back of the 45 east, worked by seven men and one boy; I am pleased to report a good improvement at this point in the yield of ore. It began to be more productive on Wednesday last, close by the long deposit of chlorite referred to in last week's report, and continues to look very well indeed. The stratum surrounding it has all the essential properties intermixed for the yield of ore in this lode, and the fissures and joints throughout the stope are all strongly coated or stained with copper, from which I infer the improvement will be lasting. We have raised over 3 tons good quality ore this week; it is tending west and north in each direction, we have large sections of the lode standing. In the 50 east, driven by six men, 4 ft., the stratum is harder, being intermixed with more capel, it still yields occasionally stones of yellow ore and is intermixed with arsenical mundic, and, on the whole, not unfavourable to the yield of ore in large quantities.

MOUNT BAY CONSOLS.—W. Argall, J. James, J. Rowe, and W. H. Argall: Trebaroah: We have reset the 50 cross-cut, south-west of engine-shaft, to six men at 10*l.* per fathom. The only change to be seen is more water coming from the end, and this is a good indication. We have also reset a tribute pitch in back of 62 level, west of Richard's shaft, at 13s. 4d. in 1*l.* The lode is worth 6*l.* per fathom. The sale of copper ore realised 320*l.* 13s. 2d.—Sydney Cove: Since last report a large quantity of sand has been cleared from the shafts and levels, and in a few days we shall be able to see something of these leve's. In the 20 driving east on Browne's lode the lode is 1 ft. wide; worth 4*l.* per fathom for copper and tin. This level is driving by four men at 30s. per fathom. The 10 has been holed to the winze sunk on Browne's lode. We have now set two men to stope this ground at 20s. per fathom. The lode is worth 3*l.* per fathom.—North Part: Nine men are still clearing adit levels. We are driving the shallow level on No. 1 lode from eastern shaft by four men at 2*l.* 10s. per fathom. The lode is worth about 9*l.* per fathom. In the stopes in deep adit, the lode is

4 ft. wide; worth 4*l.* 10s. per fathom. We are breaking this lode by four men for 5*l.* per fathom. We have reset the driving on No. 6 lode to six men at 25s. per fathom. The lode is 2 ft. wide; worth 4*l.* per fathom. We are making good progress in the sinking of the new engine-shaft, and are still finding branches containing tin. The engineers have fixed the boilers and are getting on with the engine, and the masons are building the boiler-house.—Pembro: We are driving the cross-cut at the 30 south by nine men to intersect No. 2 copper lode. We are now in about 3 fms., and in congenial ground.

MONA CONSOLS.—W. Bawden, Sept. 11: The lode in the winze is much of the same size as given in my last week's report, 2 ft. wide; and we have taken out some stones of good quality ore in them in the past week, but the lode has been somewhat disordered by meeting with a heave, and the bottom of the winze has become vughy and pouring up a quantity of water, which is a good omen.

MOUNT CARBIS.—Geo. Johns, Sept. 14: The lode in 50 north is worth 25. per fathom both east and west of cross-cut. The lode in 38 north is worth 25 per fathom. The lode in 27 west end is worth 12 per fathom. No other change to report.

MYNYDD GORDDU.—T. Kemp, Sept. 13: In cross-cutting the north part of the lode behind the forebreast of the 46 end, west of cross-cut, I have nothing new to report; the lode so far as crossed in that direction is of the same character as stated in last week's report, being principally composed of killas, with branches of spar crossing the driving; the lode tight for progress. The north part of the lode carried west of No. 1 cross-cut from the main level (the 46) has within the last two or three days very much improved, being composed of killas and quartz, carrying a good rib of silver-lead ore up and down the driving of very good quality, and from the appearance of the breast to-day no doubt a further improvement will take place as the drive extends. The lode in the stope on the caunter, and over the back of No. 2 cross-cut is worth 10*l.* per fathom; the ground still continues extremely hard for breaking. The men here have completed the stull, and nearly all the ore stuff broken from hence will for some time remain under their feet, so as to enable them to reach the back of the stope. The north part of the lode in the winze under the 34 has become poor, consequently this bargain is suspended. The lode in No. 1 stope under the 34, on north part of the lode, is worth about 15*l.* per fathom. The men in the stope to the east of cross-cut under the adit continue to break some very good ore stuff which will pay. Hauling and dressing going on as usual, and the machinery in good order.

NEW KITTY.—Wm. Vivian, Sept. 14: We continue to make good progress in sinking the engine-shaft, which is now about 9 fms. below the 36. In the 36 driving east the lode is producing a little tin, but not to value. We have commenced the work at Thomas's shaft. When we get up the horse-whim we shall commence to clear the shaft.

NEW TERRAS.—T. R. Pryor, Sept. 14: We have been clearing through a break in the adit during the week; we expect to get through this break in a few days, and in my next I hope to report that we have reached the winze, and then we shall be able to push on vigorously with the sinking of the engine-shaft. We have broken some rich tinstuff from a side lode to the south of the deep cutting; some of these stones contain about ¼ tin. We are making fair progress with the different buildings.

NEW WEST CARADON.—N. Richards, Sept. 13: The lode recently intersected in the 38 cross-cut, south of Hallett's shaft, is slightly improving; it is over 2 ft. wide, producing saving work for copper—a very promising-looking lode. All other points are much the same as stated in the report for the general meeting next week.

NORTH BLUE HILLS.—S. Bennetts, Sept. 13: We have had a ton or two of the lodestuff broken from various points in the back of the adit and found it tinney throughout, but as might be expected in a position of that kind, not of much value, all payable portions having been taken away. The men are employed in driving the end on the lode further west.

NORTH GREEN HURTH.—J. Polglase, Sept. 7: The dip in the strata referred to last week has disappeared. No particular change to notice. The vein in the north-east drivage is small and poor. The level driving south from shallow level cross-cut is much the same as last reported.

NORTH HERODSFOOT.—Thomas Trelease, Sept. 14: The stope in bottom of the 117 is now yielding 8 cwts. of ore per fm., and the stope in back of this level is worth 6 cwts. The lode in the end has again improved in the past week; it is now worth 15 cwts. of ore per fm. The ground by the side has also improved, and is more congenial for producing lead than it has been before, since we got through the old stull. We are now getting just under the stope we have in the bottom of the 80, which we suspended some time since on account of so much water, &c.; if this proves to be the same shoot of ore we have in the 90 we have 35 fms. of backs between the 117 and that level, as none of the intermediate levels are in so far north as these two. If the lode continues productive in the 117 I think it will be wise to clear the old stull to get up to drive the 106.

NORTH PENSTRUTHAL.—S. Davey, W. Polkinghorne, Sept. 14: Good progress is being made with the sinking of Highburrow shaft below the 132, sinking by eight men and four boys, engaging the whole time from Monday morning, 2 A.M., until Saturday, 6 P.M. There is no change to remark in either of the bargains except the 120 west, where the lode is 5 ft. wide, worth for tin 6*l.* per fathom. We consider this important, and look for further improvement from present indications.

OKEL TOR.—H. Bulford, J. Rodda, Sept. 14: We are making good progress at the new shaft east, and calculate to have the skiproad and plat completed so as to draw from the 50 by the end of next week. Some old timber having broken between the 50 and 65 has caused us great trouble in the matter of getting away the stuff coming from the shaft and plat, and nearly a week's delay. We have started two pares of men in the 50 east to break mundic, and more men will be put to work in this level as they come round; at present, however, men are very scarce. No. 1 stope, in bottom of the 65, in the western part of the mine, is set to four men, at 4*l.* 10s. per fm.; the lode is 4 ft. wide, producing 8 tons of arsenical ore per fathom. No. 1 stope, in back of the 65, is looking well, and producing 15 tons of arsenical ore per fm. No. 2 stope is also looking well, producing 18 tons of arsenical ore per fm.; these stopes cannot be set to advantage, as the hanging wall is very troublesome, and men do not care to work them on contract. No. 1 stope, in back of the 35, is set to six men, at 5*l.* per fm.; the lode is 6 ft. wide, producing 12 tons of arsenical ore per fathom. No. 2 stope is set to six men, at 4*l.* 10s. per fm; the lode is 7 ft. wide, producing 14 tons of arsenical ore per fathom. The intermediate end, driving west in back of this level, is set to four men, at 11*l.* per fm.; the lode is 6 ft. wide, producing 10 tons of arsenical ore per fathom. The intermediate end driving east, in back of the same level, is set to four men, at 10*l.* 10s. per fm.; the lode is 8 ft. wide, producing 12 tons of arsenical ore per fathom.

OLD GUNNISLAKE.—Wm. Skewis, R. C. Seccombe, Sept .12: In taking down the lode in adit level west we find it to be about the same size as when last reported. It still continues to yield rich quality copper ore, but not equal in value to last taking down. This we think chiefly arises from our being near the cross-course, which we may intersect any day.

OLD SHEPHERDS.—R. Nancarrow, J. Nancarrow, Sept. 11: We beg to hand you a line by post to inform you more particularly that we have succeeded in finding the old sump-shaft below the adit level, and dropped a line 20 fathoms, which appears to be clear at this depth—20 fathoms below the adit level, but whether it is good and secure for the 20 fathoms we cannot yet ascertain. We have now dialled up the adit level to find the position of the shaft at surface, and set a contract to sink and make the shaft good from surface to adit; this will be done with all possible dispatch. We have also dropped our lift of pumps, and forked the water about 15 fathoms below the plunger-lift, making a total drainage of water about 40 fathoms below the adit level. This we consider very satisfactory, with other work progressing favourably.

PANDORA.—H. Nottingham, Sept. 14: The different points working underground show no material change for the week. The 45 stopes, north of winze, continue to look very well. We are breaking more stuff this month than we have for some time past, and keeping the crusher running regularly. I hope to sample 50 tons next week, in equal quantity of lead and blende. Machinery is all working well, but the fine weather we are having is beginning to tell very much on our reservoirs. Still it is most probable we shall have rain again before they run out.

PARYS. T. Mitchell, Sept. 13: The end driving east of the cross-course at the 65 is looking very promising, and the lode is improving. There is some good copper ore coming in, and we think this place will soon enter into paying ground. There is plenty of unwrought ground in this direction, and the facilities for working it are very convenient. The surface trial in the western part of the mine continues to produce small strings of rich copper ore. We have the two lots of copper ore ready for the sampling to-morrow.

PELYN WOOD.—T. H. Bennett, Sept. 14: We continue to make good progress in our drivage and through one of the finest channels of ground I have ever seen. I now calculate we must be within a short distance of the east and west lodes aimed at. At present rate of driving, 3½ fms. per week, we may fairly reckon on intersecting them in about a fortnight. Of course not having seen the lodes below the costean pits, and our level being about 35 fms. deep, the bearing and dip of the lode may deviate and consequently mislead us a little, but judging from the dialling we shall reach it in about the time stated. We are breaking in our caunter good stones of grey and black ore, and the ground is becoming easier as we extend; compelled this week to fix the whole sett of timber. I consider these are features which speak well for the junction.

PENHALLS.—S. Bennetts, J. Goyne, Sept. 13: There has been no lode broken in the 80 west end since last reported on, consequently the value remains the same—7*l.* per fathom. In the 70 east end the lode is 1½ ft. wide, of low quality tinstuff. The winze below the 55 is worth 15*l.* per fathom. On the north lode both the 50 and 60 ends east are without much change. The 40 west end is worth 25*l.* per fathom, and the winze below the 30 is worth 12*l.* per fathom.

PHŒNIX AND WEST PHŒNIX UNITED.—J. Truscott, Sept. 14: Setting Report: Seccombe's Shaft: The 200 to drive west from a point east of this shaft, by six men, at 16*l.* per fathom; lode worth 10*l.* per fathom.—Old Sump Shaft: The 150 to drive in a southerly direction to intersect the lode west of the cross-course, by two men, at 17*l.* per fathom. The 130 to drive west, by four men, at 12*l.* per fathom; lode worth for part carried, 6 ft., 12*l.* per fathom. No. 1 stope in back of this level, by six men, at 4*l.* per fathom; lode worth 14*l.* per fathom. No. 2 stope in back of this level, by four men, at 5*l.* per fathom; worth 10*l.* per fathom. The 120 to drive west, by two men, at 6*l.* 10s. per fathom; lode worth for part carried, 6 ft., 6*l.* per fathom. To stope the back of this level, by six men, at 4*l.* 10s. per fathom; lode worth 20*l.* per fathom. The 110 to drive west, by two men, at 6*l.* 10s. per fathom; lode worth for part carried, 6 ft., 15*l.* per fathom. To stope the back of this level, by four men, at 3*l.* 15s. per fathom; lode worth 14*l.* per fathom. To stope the bottom of this level, by two men, where the lode is worth 12*l.* per cubic fathom. No. 1 stope in back of the 100, by four men, at 4*l.* per fathom; lode worth 18*l.* per fathom. No. 2 stope in back of the 100, by four men, at 2*l.* 15s. per fathom; lode worth 20*l.* per fathom. The 80 to drive west, by two men, at 6*l.* 10s. per fathom; worth for part carried, 6 ft., 7*l.* per fathom. No. 1 stope in back of this level, by four men, at 4*l.* per fathom; lode worth 10*l.* per fathom. No. 2 stope in back of this level, by six men, at 4*l.* per fathom; lode worth 23*l.* per fathom. No. 3 stope in back of this level, by six men, at 4*l.* per fathom; lode worth 18*l.* per fathom. No. 4 stope in back of this level, by six men, at 3*l.* 5s. per fathom; lode worth 20*l.* per fathom. The 60 to drive west, by two men, at 6*l.* 10s. per fathom; lode worth for part carried, 6 ft., 10*l.* per fathom. No. 1 stope in back of this level, by six men, at 4*l.* 5s. per fathom; lode worth 20*l.* per fathom. No. 2 stope in back of this level, by four men, at 3*l.* 10s. per fathom; lode worth 10*l.* per fathom. The 50 to drive west, by four men, at 9*l.* per fathom; lode worth for part carried, 6 ft., 10*l.* per fathom. To stope the back of this level, by four men, at 3*l.* per fathom; lode worth 10*l.* per fathom. To stope the back of the 30 west, by six men, at 3*l.* per fathom; lode worth 20*l.* per fathom. To stope the back of the 20 west, by six men, at 4*l.* 10*l.* per fathom; lode worth 15*l.* per fathom.—Western Mine: New Engine-Shaft: The 50 to drive west, by two men, at 18*l.* per fathom; lode worth for part carried, 6 ft., 30*l.* per fathom. To stope the back of this level, by four men, at 6*l.* per fathom; lode worth 20*l.* per fathom. No. 1 stope in back of the 40, by three men, at 5*l.* 10s. per fathom; lode worth 12*l.* per fathom. No. 2 stope in back of the 40, by six men, at 3*l.* 10s. per fathom; lode worth 22*l.* per fathom. No. 3 stope in the back of the 40, by four men, at 3*l.* 10s. per fm.; lode worth 20*l.* per fathom.—Stowe's Shaft: The 70 to drive east, by six men, at 6*l.* per fathom; lode worth 8*l.* per fathom. No. 1 stope in back of the 60, by six men, at 5*l.* per fathom; lode worth 30*l.* per fathom. No. 2 stope in back of the 60, by six men, at 3*l.* 5s. per fathom; lode worth 25*l.* per fathom. No. 3 stope in back of the 60, by four men, at 5*l.* per fathom; lode worth 18*l.* per fathom. To stope the bottom of 60, by 12 men, at 4*l.* per fathom; lode worth 20*l.* per fathom. We set on Saturday 11 pitches at tributes, varying from 5s. to 13s. 4d. in 1*l.* for tin and copper.

PIONEER.—Sept. 14: Silver-lead Mines, Holywell: Engine-shaft: The 85 yard level east continues yielding good ore without any change since last report, and promises to open out into a solid rib of ore very soon. The lode has contracted to about 4 ft. in width, which is favourable to its making richer ore deposits. This level should be pushed on as rapidly as possible, as doubtless thousands of tons of ore will be raised between our present workings and the new shaft.

POLROSE.—W. Bennetts, Sept. 13: The lode in the shaft continues of the same size and character as last reported, producing saving work for tin throughout. In the past week we have been meeting with strings and seams of rich tin to the south of the lode, and the ground is very favourable for the production of mineral, and by the end of the week the shaft will be down 11 fathoms below the 100, and every effort shall be made to finish the lift to the 112 as soon as possible,

PRINCE OF WALES.—S. Roberts, Sept. 13: The lode in the 102 east is not as good as it was last week, but still it is a large fine looking lode, 3½ ft. wide, and worth 10*l.* per fathom for tin and copper. We attach but little importance to this falling off in value, we think it only temporary. In the 102 west the part of the lode driving on is small, but there are indications of the main part of it coming into it shortly. The nature and character of the ground is improving. In the 90 west the men are driving north on the course of the cross-course, which has heaved the lode in that direction. Ground rather stiff for driving. The stopes and tribute pitches throughout the mine without change since last week.

ROMAN GRAVELS.—Arthur Waters and Son, Sept. 14: No change worthy of notice has taken place for some time past in the ends and stopes throughout the mine. The lead ore producing points continue making their usual returns. The new winze in 110, north of new shaft, is now down about 4 ft., and the part of the lode being carried is worth 1½ to 2 tons per fathom. The usual sampling will take place on Thursday.

RUSSELL UNITED.—John Bray, Sept. 14: The lode in the 55 is full 3 ft. wide, and promises to open out larger, producing good stones of hard yellow copper ore. The ground in the cross-cut north on the 97 towards the great north lode is harder for driving. Yesterday we had some facings of copper ore against the capels. The men at Stephen's shaft are getting on well with cutting down the new line of shaft. The machinery is working well.

SILVER HILL.—G. Rickard, Sept. 14: The ground in the tunnel forebreast is still being mixed with hard quartz, mundic, and patches of good quality copper ore; the heads or points in the killas, or clay-slate are also carrying good faces of copper ore, thus showing that we are passing on in a highly mineralised formation of strata, and I look forward with the most sanguine expectations of meeting with good results upon cutting the lode. Wheal Brothers lode is without any change of importance since my last report; I hope, however, soon to be able to report a good improvement in the mine.

SORTRIDGE COPPER.—W. Skewis, Sept. 13: The water-wheel is now complete, and the stamp axle with connecting shaft fixed, and frames erected, as well as other portions of the stamps being got on with as quickly as possibly. The launder from the reservoir is finished, and the men are engaged in making the water-course to bring the water into the pond. I expect to have the stamps to work by the end of this month or early part of next. Good progress is being made in the deep adit, and we shall soon be in a position to make another and final attack to letting the water down, and when this is done we shall at once set men to work on the rich lode of tin in the 40. All the operations are progressing satisfactorily, and are being pushed with greatest possible dispatch.

SOUTH CONDURROW.—W. Rich, W. Williams, H. King, Sept. 13: The lode in Marshall's shaft below the 66 is worth 14*l.* per fathom. The 66 end west is worth 8*l.* per fathom. The stope in the back of the 66 east is worth 10*l.* per fm. The lode in the 54 end west is worth 10*l.* per fathom. The 40 end west has a kindly appearance, and carries stones of tin. The 20 end, west of engine-shaft on the flat lode, is worth 18*l.* per fathom. The 30 end, west of ditto, is worth 15*l.* per fathom. The stope in the back of this level is worth 18*l.* per fathom. The 40 end, east of engine-shaft, is worth 10*l.* per fathom. The 50 end east is without tin to value, but the lode has a strong and kindly appearance. There is nothing new to report on in the winze below the 60 east. The lode in this winze is worth 15*l.* per fathom. We are getting very near the rise in the back of the 70. The 70 end, east of King's shaft, is worth 10*l.* per fathom, and the stope in the back of this level is worth 12*l.* per fathom. The 80 end east yields low quality tinstone. The lode in the bottom of the 80 is worth 15*l.* per fathom. We are pushing on the repairs to the boiler for the stamping-engines, and are building a new stack or chimney for the calciner and tin-burning ovens, which is absolutely necessary.

SOUTH DARREN.—Henry James, Sept. 14: I have just come up from underground. There is nothing new to report. The 120 east and west continues to look very well. In the 110 east the lode is small and poor, but there are good indications of it opening out wider and better for ore as we advance. Saturday being our setting-day, I shall send out a full report next week. The 45 tons of silver-lead ore sold on the 8th inst., realised 633*l.* 7s. 6d.

SOUTH DEVON UNITED.—Wm. Hooper, Sept. 14: Setting Report: The 110 fm. level, east of Brook's engine-shaft, has been driven during the past month 2 fms. 1 ft., set to six men, at 11*l.* per fathom. The lode is fully 5 ft. wide, worth 10*l.* per fathom, and every appearance of a still further improvement taking place. The character of the lode is all that can be desired for the production of large quantities of ore, and taking into consideration its being more defined here than in the level above this point,—the 100, I have every reason for believing as the level is extended east that valuable discoveries will be made. Water is coming very freely from the above, and, no doubt, as we get some distance further from the cross-course we may be enabled to sink in the bottom of the 110. Up to the present time there has been no decrease in the water, consequently it is impossible to try to sink for the time. No. 1 stope in the back of this level is reset to four men, at 3*l.* 10s. per fathom. The lode is 3 ft. wide, worth 6*l.* per fathom. No. 2 stope is reset to four men, at 3*l.* 17s. 6d. per fathom. The lode is 3 ft. wide, with a value of 10*l.* per fathom. No. 3 stope is reset to four men, at 3*l.* 12s. 6d. per fathom. The lode is 3 ft. wide, with a value of 9*l.* per fathom. No. 4 stope is reset to four men, at 3*l.* 10s. per. fathom. The lode is 3 ft. wide, with a value of 9*l.* per fathom. The rise against Martin's shaft, in the back of the 80 fm. level has been risen during the past month 3 fms. 1 ft. 4 in. The lode is 4 ft. wide, containing spar, mundic, and occasional stones of ore. There is no change in the character of the ground since last reported, being favourable for rising—good duty is being done. The stopes in the back of the 80 fm. level are reset as follows: No. 1 to eight men, at 6*l.* per fm. The lode is 4 ft. wide, worth 8*l.* per fathom. No. 2 stope to four men, at 4*l.* 10s. per fathom. The lode is 4 ft. wide, with a value of 7*l.* per fathom. No. 3 stope to six men, at 4*l.* 5s. per fathom. The lode is 3 ft. wide, with a value of 7*l.* per fathom. The adit level, west of old sump shaft, has been driven during the past month 2 fms. 4 ft. 3 in.; reset to three men at 5*l.* 10s. per fm. The lode is 4ft. wide, of a very promising description for the production of ore, especially when deeper levels are being extended under the mass of gossan which is so prominent in this level. Pickstone's shaft has been sunk during the past month 2 fms. 3 ft. 6 in. Now down 10 fms. under the 140, and have reset 2 fms. more to the men at the same price as before—25*l.* per fathom. As soon as this depth is reached we shall immediately commence to drive north to intersect the lode; but for the scarcity of water in the beginning of the month we should have sunk nearly 4 fms. This has our best attention, and every effort is being made to intersect the lode as quickly as possible. Martin's shaft has been sunk during the past month 1 fm. 30 ft. Reset to nine men 5 fms. stent at 32*l.* per fathom. Now down from surface 44 fms. 4 ft. Not so much ground has been sunk this month in consequence of alterations having to be made to poppet heads for steam-engine, which is now working very satisfactorily. All the work at surface is going on very well, and everything is being pushed on as fast as possible for our next sampling.

SOUTH PENSTRUTHAL.—S. Davey, Sept. 14: We have no change worthy of special remark. All points of interest are hastened on. The castings, &c., are not yet supplied for fixing the 130 plunger-lift, although promised a fortnight since. In the meantime the men are sinking the shaft.

SOUTH TOLCARNE.—Thos. Angove, Samuel Arthur, Sept. 13: In the 70 end west the lode is 8 ft. wide; worth 12*l.* per fathom. In the 70 end east the lode is 4 ft. wide; worth 9*l.* per fathom. The 60 end east is worth 7*l.* per fathom. The 50 end west is worth 8*l.* per fathom. The rise in the back of the 50, west of engine-shaft, is worth 8*l.* per fathom. The rise in the back of the 50, east of engine-shaft, is worth 8*l.* per fathom. The 40 end east is worth 7*l.* per fathom. The rise in the back of the 20 is producing stones of tin.

TAMAR SILVER-LEAD.—R. Goldsworthy, Sept. 14: Saturday being setting and pay, the following bargains were set:—To rise against the new shaft, by six men, at 13*l.* per fathom. No lode taken down since last report. To tram all the stuff, by two men, for one month, at 5*l.* 5s. To drive the adit level south, by four men, at 4*l.* per fathom; lode 3 ft. wide, producing good stones of silver-lead, and promising for further improvement. Tribute pitch in the back of the 57 south, by four men, to be paid 10*l.* per ton of lead; 12s. and 10s. per ton for best and second fluor spar.

TANKERVILLE GREAT CONSOLS.—Arthur Waters and Son, Sept. 7: Tankerville Mine: The best news we can give you this week is that the main lode is cut into by the 232 cross-cut, and at that point found to be 6 ft. wide, showing the usual characteristics—beautifully white carbonate of lime, a cavity extending upwards and downwards, solid lumps of soft rich galena, with good specimens of highly crystallised quartz—a lode which taken altogether reminds us of old times in Tankerville. We can only see the lode immediately opposite the cross-cut, but the indications to the east and to the west are sufficient to warrant our putting the yield at 3 to 4 tons of lead ore per fathom. The water is all drained from the 220, a proof that the cavity is an extensive one. We are pushing the drivage here to full width, and when the ground is squared to footwall shall drive east and west on the course of the ore deposit. What is now in sight is the best lode we have seen here for years past. No change on north lode since our report of last week.—Potter's Pit: This portion of the mines is opening out better than for some time past, and the chances are that we shall find runs of ore on the north and south lode, as well as on the east and west or main lode, and that too in the direction of Pennerley, entirely in new ground beyond any workings made and runs of ore seen by the late company. We have already driven through the bed of country up to which our predecessors worked, and which seemkd to cut off the lode and ore deposits, and have found good orestuff, worth in places 2 tons per fathom. We have had this week some very solid lumps of galena from this point, 7½ fms. below the 105, all free from discolouration, and not in clinker-like form, implying that we are getting near the main body of the oreground. The heat continues intense.—Pennerley: No change here worth writing about since last week.—Bog Mine: The water is now about 4½ fms. below the 163, engine and pumps doing well. New crusher rolls have been put in to-day, and the new dressing machinery will be worked again to-morrow under favourable circumstances.

TANKERVILLE GREAT CONSOLS.—A. Waters and Son, Sept. 14: We are gradually getting through the cavity at the 232, and the lode continues to open out as well as stated in our report of Sept. 7. We believe the lode will further improve directly the cavity has been passed. The lode in the winze below the 220 west has slightly improved, being to-day worth about 25 cwts. per fathom. The 192 west, on north lode, is looking very well, being worth quite 3 tons per fathom. Other points in the mine are without change to notice since last reported.—Pennerley: The various points in this mine are without change worthy of remark for some time past.—Potter's Pit: The workings here continue to open out well, and fully confirm what we stated in our report of the 2nd inst—*i.e.*, that they never looked so well as at present since started by the present company.—Bog Mine: The water is to-day 6 fms. 3 ft. below the 163, and the engine and pitwork are still doing good duty. The new dressing machinery is now working well, and the lead ore and blende being sent into the bin in as clean a state as could be wished. There is no change to notice in any of the ends and tribute pitches since our last full report.

TRESAVEAN.—Capts. J. Prisk and W. Edwards, Sept. 9: We are pleased to report the pumping engine and the 16-in. plunger lift in the 30 continues to work well and are doing excellent duty. The drop-lift in engine-shaft has been to the 40, and is forking rapidly. The men are at present engaged in fixing ladders and other preparatory woak required previous to fixing the next plunger at the 75. The stamps continue to work well, and the dressing-floors are being pushed on as fast as possible. The walls of the burning-house are complete, and the ovens will be commenced forthwith. We may also add the stuff coming from the stamps is quite satisfactory.—Wheal Boys: The lode in No. 3 stope, in back of shallow adit, is 7 ft. wide, and of the same value as last reported, 20*l.* per fathom; seeing this point is looking well and promising to produce large quantities of good tin-stuff, we have increased the number of hands to 12. We have this week commenced a new stope in the back of the said level, west of No. 3, where we expect to have a profitable lode; we have six men employed here. The lode in the stope in the back of the deep adit, west of Wheal Boys shaft, is 7 ft. wide, producing paying tin-stuff, and has the appearance of speedy improvement; all surface work is being pushed on as fast as possible.

TREVAUNANCE UNITED.—Wm. Vivian, Sept. 14: In the 55 driving east the lode is very kindly in appearance, producing a little tin, but not to value. In the cross-cut driving south of middle shaft at the 55 we are meeting with branches of spar and mundic. I am hoping these changes indicate our near approach to the lode. Our tribute ground continues to produce some good tinstone.

VAN CONSOLS AND GLYN.—J. Roach, D. Douglas, Sept. 13: In the intermediate level driving east, on south part of lode in No. 1 stope, is yielding 2 tons of lead per fathom, with indications in favour improvement. The stope in sole of level will average 2½ tons of lead per fathom. Two points in No. 1 stope, above the 40, is producing 25 cwts. of lead per fathom. Latterly we have driven the 50 east under the intermediate level; we are now cross cutting north to get under the head alluded to in the sole of it, where we believe we shall be successful. The lode only 25 ft. above is rich, and looks strong enough to continue to a great depth. A continuation of the lead referred to struck in the 50 would, no doubt lead to immense discoveries of ore, both longitudinaly and vertically. In a few days hence we shall be in a position to speak definitely as to our prospects in this undeveloped section of the company's property. We have sent out samples of 35 tons of lead, and invited tenders for same on 16th inst.

WEST CARADON.—N. Richards, Sept. 13: There is no change to notice throughout the mine since the report for the general meeting last week each point maintaining its size and value. The mine is looking well.

WEST CREBOR.—J. Andrews, Sept. 13: We continue to make good progress in sinking the engine-shaft, which is now down 5 fms. 4 ft. below the 50. There is no change in the shaft, as no lode has been taken down during the past week. The lode in the 50 east is 2 ft. wide, composed of quartz, capel, mundic, and a little copper ore, and looking very promising. There is no change in the 50 west.

WEST DEVON GREAT CONSOLS.—G. Rowe, Sept. 13: The lode in the 36, west of engine-shaft, is improving in size, and producing very strong mundic, impregnated with good quality copper ore. The lode in the drivage east of the shaft, in the same level, is without change during the past week.

WEST GODOLPHIN.—T. Hodge, Francis Hodge, Sept. 13: Bellingham's Lode: The 80 west end is worth 5*l.* per fathom. In the 70 west we have just passed a crossing; the present end produces good stones of tin. In the 70 east the lode is letting out more water, producing low price tinstone. The 60 west is in a span of lode of little value. The 50 west is worth 8*l.* per fathom. The stope in the bottom of said level is worth 8*l.* per fathom. The stope in the back is worth 12*l.* per fathom. No other change.

WEST KITTY.—W. Vivian, Sept. 14: In the 72, driving east, the lode is worth 12*l.* per fathom In the 60, driving east of rise, the lode is worth 30*l.* per fm. In the 60, driving east of cross-cut, the lode is worth 12*l.* per fathom. In the stopes in the bottom of the 72 the lode is worth 25*l.* per fathom. In the stopes in the back of the 72 the lode is worth 50*l.* per fathom. In the stopes in the back of the 60 the lode is worth 25*l.* per fathom.

WEST LISBURNE.—Wm. Northey, Sept. 13: Since the date of my last advice the men have been busily engaged in assisting the smith in making the large rods, and the carpenters and men in erecting the same and fixing substantial blocks of wood and catches to the rods in case of a breakage, and making three rods over the rods, and re-laying the same to and from the shaft and pumping-wheel. The mason has completed the new stand for the angle-bob and new roof on the office, in fact the work has been pushed forward with all speed, and will be completed without delay.

WEST MARY ANN.—W. G. Nettle, Sept. 8: Since our last general meeting we have extended the 40 south 10 fathoms, making the distance from shaft 13 fathoms. Within the last 6 fathoms the ground has naturally changed for the better; we appear now to have left the elvan behind us. The lode has greatly improved in size and quality, being now fully 1½ ft. wide, and containing a considerable portion of silver-lead ore, with signs of further improvement. The lode and its surroundings are of such a lead bearing character that nothing like it has been seen in the working of the mine before. At the 40 north we have driven about 2 fathoms without any material change in the lode. At the 24 north the lode is still in elvan, and is disordered by it. In the bottom of this level, about 15 fathoms north of shaft, we sank a winze 2 fms., and found the lode maintained it productive character, but the water was inconvenient to cope with, and we suspended it until it was somewhat drained by other workings. In consequence of a breakage to the engine the water rose above our pumping apparatus in bottom of shaft. We have made, and are still making, every exertion to set matters to rights, and hope soon to succeed, when the drivage will be resumed, and from present appearances we have every reason to believe our lode will be found larger in size and improved in quality. Our little vertical engine that has served us so well in putting our shaft down 40 fms. under the adit, is now at its extent of power, therefore the present meeting will do well to consider and, if practicable, to decide on the removal of their larger engine from Wheal Mary Ann to our mine to enable us to sink deeper, so as to get in under this ore ground gone down as quickly as possible.

WEST WHEAL TOLGUS.—J. Gilbert, Sept. 14: Richards's Shaft: The lode in the 105, driving west of shaft, is 5 ft. wide, and still yielding 4 tons of good copper ore per fathom, and the men are making a little better progress in driving. The lode in the 85, driving west of shaft, is 2½ ft. wide, yielding some good stones of copper ore, and letting out a good deal of water, and looking very promising. The lode in the stope in the back of the 105, west of shaft, is 6 ft. wide, and yielding 5 tons of ore per fathom, worth 35*l.* per fathom. The lode in No. 2 stope, in the back of the 105, west of shaft, is 5 ft. wide, and yielding 4½ tons of ore per fathom, worth 32*l.* per fathom. We shall sample on Tuesday next about 180 tons of copper ore

WHEAL BOYS.—W. T. White, Sept. 14: I cannot speak of any particular change in our bargains but from the appearance of the copper lode at the 50, I certainly think good results will be met with as depth is attained.

WHEAL CREBOR.—H. Phillips, Sept. 12: The lode in the 132, east of new shaft, has improved in size and character; it is now 4 ft. wide, composed of capel, arenical mundic, and stones of good quality copper ore. We have communicated the rise in back of the 132, west of new shaft, with the No. 7 winze, sinking below the 120, and resumed the driving of the 132 west. The lode is 3 ft. wide, of a very promising character, producing mundic and stones of copper ore. The lode in the stope in the bottom of the 120, west of winze, is worth 50*l.* per fathom. The lode in the 108, driving east of new shaft, also the 103 cross-cut driving north is without change. The lode in the stope in bottom of the 108, east of winze, is worth 30*l.* per fathom. The lode in the stope in the bottom of the 138, west of winze, is worth 20*l.* per fathom. The lode in No. 1 stope in back of the 96 is 6 ft. wide; worth 25*l.* per fathom. The lode in No. 2 stope in back of 96 is 5 ft. wide; worth 20*l.* The lode in No. 3 stope in back of 96 is worth 15*l.* per fathom. We have cut the eastern heave of the lode in the 48, east of new shaft. The lode is 2½ ft. wide, a fine looking lode; value 20*l.* per fathom. We shall drive by the side of the lode for some time, in order to save the ore more clean. When next taken down we shall be able to ascertain if there is still more lode to the south. The continuation of this lode looks well for the eastern ground. This cross-course is in advance of the 108, east of new shaft.

WHEAL COATES.—Wm. Vivian, Sept. 14: In the 70, driving east, the lode is worth 9*l.* per fathom. In the 20, driving east, the lode is worth 7*l.* per fm. We have put down our new pitwork, but have not yet put it to work, and, I think, it will not be advisable to do so until we get another boiler to the engine. We have purchased a good second-hand boiler for 140, which is now being put right, and I hope to have it on the mine next week. We have commenced operations at the eastern shaft, and are about to put up a horse-whim and clear up the shaft.

WHEAL GRENVILLE.—T. Hodge, Sep. 14: We are making fair progress in sinking the engine-shaft below the 190 fm. level The 190 east end is worth 10*l.* per fathom. The 178 east is not looking so well—worth 8*l.* per fathom. The 165 west is poor. The 165 east is worth 10*l.* per fathom. The winze below said level is worth 20*l.* per fathom, with more lode standing in the side. The 150 east is worth 16*l.* per fathom. The 140 is worth 11*l.* per fathom. The 120, west of the western shaft, is worth 10*l.* per fathom. No other change.

WHEAL JANE.—James Reed, Sept. 13: I beg to hand you my report of this mine.—Great Flat Lode: The stope in the bottom of the 70, west of Tremayne shaft, is without any change to notice; lode strong and masterly, and worth for tin 12*l.* per cubic fathom. The stope in the back of the 70, west of Tremayne shaft, has a more promising appearance as we advance south; lode large, and worth for tin 11*l.* 10s. per cubic fathom. No. 2 stope near 60 cross-cut is worth for tin 12*l.* per cubic fathom. There is no change to notice in the cross-cut north at the 70. This lode in the rise in the back of the deep adit is opening up valuable ground, and worth for tin 18*l.* per fathom for the length of the rise, 10 ft. This lode in the rise in the back of Tremayne adit is worth for tin 10*l.* per cubic fathom.—Ready Money Lode: In the 16 driving east from Gilbert shaft the lode is 3½ ft. wide; worth for tin 8*l.* per fathom. The four stopes in the back of the deep adit are each worth for tin 11*l.* per fathom. The calciners are working exceedingly well, and as we proceed shall have the benefit of the whits on the dressing-floors. The water is going over the breast of the wheel, and in the course of a few days we expect to be ready to work the stamps. The second run of frames will go to work in a day or two; it will take another process before we feel the benefit of them. We shall have a complete piece of work at the water-stamps, where no coals or enginemen will be required. I might say that it took us nearly a week to connect the new flues with the calciners which has thrown us back in the dressing, and caused a large accumulation of whits on the floors. We shall have on Saturday next 20 tons of tin ready for the market, the result of six weeks' working.

WHEAL JEWELL.—Joseph Tregoning, Sept. 13: The lode in the 40, east of new shaft, in end, is large, with favourable ground, and produces a little copper and lead, but not to value. The stope in the back is worth from 5 to 7 cwts. of lead per fathom. In the 50 east the lode is very promising for lead; the last 3 fms. driven is worth 10 cwts. per fathom. Three stopes in the back, two east and one west of the new shaft, producing 1½ ton per fathom of copper ore. In the 60 east we have met with the cross-course, which has thrown the lode southward, probably about 8 fms., as at the 50 and 40. This end is now under the

new shaft. Our tributers, 12 men and one boy on copper, are working regularly and well, and they appe ar to be getting fair wages.

WHEAL PEEVOR.—W. T. White, T. C. King, Sept. 14: We are making preparations for sinking the engine-shaft below the 100, and intend selling the whole lift as a certain bargain next week. In driving the 100 west, on the flat lode, it appears to be getting larger and wetter, and as we go in this direction it will drain the 90 and prove our main tin lode. We have spilled through the cross-course at the 90 west, and find the lode to be from 3 to 4 ft. wide, and very similar in appearance and productiveness as it was at the 80. We shall commence to cross-cut to the middle lode at this point next week, and we feel confident of opening up a good run of tin ground on both these lodes at this level, and when communicated to again increase our returns. All other bargains as as last reported.

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 15, 1882.

IRON.	£ s. d.	£ s. d.
Pig, GMB, f.o.b., Clyde	2 10 0	2 10 1½
,, Scotch, all No. 1	2 10 9	2 11 0
Bars, Welsh, f.o.b. Wales	5 15 0	6 0 0
,, ,, in London	6 5 0	6 10 0
,, Stafford., ,,	7 5 0	7 7 6
,, in Tyne or Tees	6 0 0	6 5 0
,, Swedish, London	10 0 0	—
Rails, Welsh, at works	5 15 0	6 0 0
Sheets, Staff., in London	8 15 0	9 0 0
Plates, ship, in London	9 0 0	9 2 6
Hoops, Staff.,	7 15 0	—
Nail rods, Staff., in Lon.	7 2 6	7 5 0
STEEL.		
English, spring	12 0 0	18 0 0
,, cast	30 0 0	48 0 0
Swedish, keg	15 0 0	—
,, fag. ham.	15 10 0	—
Rails, at works	5 15 0	—
,, Light, at works	7 2 6	—
LEAD.		
English, pig, common	14 2 6	14 5 0
,, ,, L.B.	14 7 6	14 10 0
,, ,, W.B.	14 15 0	15 0 0
,, sheet and bar	15 2 6	—
,, pipe	15 10 0	—
,, red	16 10 0	—
,, white	19 10 0	21 10 0
,, patent shot	17 0 0	—
Spanish	13 17 6	14 0 0
NICKEL.		
Metal, per cwt.	15 0 0	16 0 0
Ore 10 per cent. per ton	20 0 0	25 0 0
SPELTER.		
Silesian	17 0 0	17 10 0
English Swansea	17 10 0	—
Sheet zinc	20 15 0	21 0 0

TIN.	£ s. d.	£ s.
English, ingot, f.o.b.	109 0 0	113 0 0
,, bars ,, ,,	110 0 0	111 0 0
,, refined	111 0 0	112 0 0
Australian	106 15 0	—
Banca	nom.	—
Straits	106 15 0	—
COPPER.		
Tough cake and ingot	72 0 0	73 0 0
Best selected	73 10 0	74 10 0
Sheets and sheathing	79 0 0	80 0 0
Flat Bottoms	82 0 0	83 0 0
Wallaroo	73 10 0	74 0 0
Burra, or P.C.C.	73 10 0	—
Other brands ... nom.	67 0 0	69 0 0
Chili bars, g.o.b.	68 10 0	—
QUICKSILVER.		
Flasks, 75 lbs., war.	5 17 6	—
PHOSPHOR BRONZE.		
Alloys I., II., III., and IV.	£125 0 0	
,, VI. and VII.	140 0 0	
,, XI., Spl. bearing metal	117 0 0	
BRASS.		
Wire	7¾d.	—
Tubes	9⅛	—
Sheets	7¾	—
Yel. met. sheath. & sheets	6½d.-6¾ per box.	
TIN-PLATES.*		
Charcoal, 1st quality	1 1 0	1 2 0
,, 2nd quality	0 19 0	1 0 0
Coke, 1st quality	0 18 0	—
,, 2nd quality	0 17 0	—
Black, per ton	15 10 0	—
Canada, Staff. or Gla. at Liverpool	12 0 0	—
Black Taggers, 450 of 14 × 10	30 0 0	—

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than 10 quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—A strong feeling still continues to pervade the metal market, and prices for the most part keep steady. A fair amount of business has been transacted, and confidence exists in the continued maintenance of the markets for the next few months, or perhaps a further advance may not unlikely take place in prices for some metals. No new feature of any very great importance has arisen during the past week to influence the market to any extent, either in one way or the other; but at the same time advices from Egypt have rather tended to implant a better tone, although political prospects are still too uncertain to have produced any material effect upon our markets. The rise which was effected in the Bank rate yesterday may also, perhaps, in a degree tended to damp the upward feeling which predominated, but the influence borne thereby has been very limited, barely sufficient to be worthy of comment, and only causing some slightly extra disposition to make sales amongst weak holders. Prices of those metals in which speculation abounds wavered a little, but not for long, and the tone soon recovered. It is not difficult to assign a reason for the speedy restoration of a firm feeling in our markets; in fact the only surprise is that any adverse influence should have been caused at all, because the rise in the Bank rate was generally anticipated. Other money markets had already given the lead to dearer money, and it was but natural that this fact, in combination with the usual tendency that money has to become dearer as the autumn draws near, must have given every preparation for a rise.

We have so frequently dwelt upon and brought before the notice of our readers the affect which is likely to be produced by an advanced value of money at the present time that it is not necessary to again recapitulate that which we have already made our readers acquainted with, but suffice it to state that this rise can have little or no injurious affect upon the trade at large. It may necessitate weak holders to realise, and thus temporally weaken prices, but no hindrance can be placed upon *bona fide* trade with money only at 5 per cent., and when it is remembered that the money is drawn out of the banks, chiefly for harvest and agricultural purposes, it is evident it is being used for a means whereby regular trade must be greatly influenced for good. The trade seems to fully recognise this fact, and consequently with but a few trivial exceptions marked firmness has characterised prices, and more particularly so for manufactured metals, where instead of there being any tendency to make concessions, dearer rates if anything are being asked. It may interest our readers to know that on Monday next the business of the Metal Exchange will be transferred from No. 4, Lombard-court, where it has been carried on for several years past, to the more commodious premises of the New Metal Exchange, Whittington-avenue, Leadenhall street.

COPPER.—This market remains very strong, and a fair amount of business is doing. Steadiness is still the principal characteristic of the market, and this is taken as an evidence of the soundness and satisfactory condition in which the market is placed, for it shows that, comparatively speaking, there is only a small amount of speculation existing, otherwise prices would doubtless be fluctuating; and therefore it is considered that prices derive their support from the actual business that is doing to meet the regular requirements of the trade. At the same time much of the firmness which exists must be attributed in some measure to the combined strength with which holders maintain their prices. This has been a very prominent feature in the market for some long time past—that when the demand has been rather slack then holders, instead of making concessions, have supported the market by refusing to accept reduced rates, and when the demand has been a little more active then they have slightly advanced their quotations, not sufficient to check the extra enquiry, but when that improved demand has at length subsided, then instead of again lowering their prices they have sustained the market at the advanced rates, and thus there has been a steady, gradual upward course in prices. This necessarily tends to inspire confidence, and to create a more general belief that prices will continue to be at least maintained, and probably further enhanced. If a further rise is effected it may be but slow, but on that account it is likely to be more permanent. At the same time light charters, or other favourable features, might not unlikely be the means of pushing up prices more rapidly than what appears to be for the most part expected.

IRON.—This market keeps strong, and some advance has been effected in the price of manufactured. According to the various reports of the state of the trade throughout the country there is a very fair amount of business doing, and many of the works are well employed with the orders they have in hand. One of the principal adverse features in the trade at the present time is the dispute for wages amongst the masters and men, which dispute appears to be extending rather than showing signs of abatement; but it is to be hoped that some amicable settlement will ere long be arrived at, for there is the danger that any serious dispute may check consumption, and thus put a termination, or at all events postpone, the improvement which is already beginning to make itself visible. The men are said to be asking for a rise in wages of 7½ per cent., while some of the masters are said to have decided on a reduction of 12½ per cent., stating that the present condition of the trade is not sufficiently good to pay the present rate of wages.

This statement appears to be somewhat at variance with the trade reports, but at the same time it is a matter upon which outsiders cannot speak with any authority, for notwithstanding that trade reports have shown some improvement in business just lately, yet the question to be decided is whether that improvement is so pronounced and becomes so thoroughly established as to warrant the current rate of wages. The men contend that the selling price of iron is above what the awarder based his award for the current quarter, and therefore think themselves entitled to higher wages. It is difficult to foresee the result of the present disputes, but as the depression which has so long prevailed in this trade seems now to be just passing away, it is to be hoped that these difficulties will not be permitted to be carried too far, whereby any check may be placed upon the present recovery, though it is perhaps only as yet trifling. Business on the Glasgow warrant market this week has not been very brisk, and prices of Scotch pigs on Monday fluctuated betwixt 50s. 1½d. and 49s. 10d., while on Tuesday more firmness was visible, and a moderate business done from 49s. 11d. to 50s. 0½d., closing for the day with buyers at 50s.

On Wednesday business was done up to 50s. 4½d., when the market gave way to 50s. 2d., and yesterday the demand being flat the price further receded to 49s. 10d., sellers, and closes to-day at 50s. to 50s. 1½d. The shipments last week were 10,623 tons, against 14,812 tons for the same week of last year, or an increase of 4183 tons, and which makes the total shipments for the whole of this year 446,291 tons, against 398,127 tons for the same time of last year, and 508,981 tons for a similar period of 1880. The number of furnaces in blast remain at 109, and the total visible stock has been reduced by a further 928 tons, amounting to 628,647 tons, against 629,575 tons a week ago. The imports of Middlesborough pig-iron into Grangemouth last week were 6533 tons, against 5660 tons for the corresponding time of last year, or an increase of 1873 tons, and which leaves a total decrease for the whole of this year compared with last year of 50,138 tons. The Cleveland market is reported quiet, but prices are firm, and a tolerably steady feeling prevails. The shipments continue heavy, the deliveries of pigs last week being about 26,000 tons. Stocks are further reduced, those in Messrs. Connal and Co.'s stores showing a reduction of a further 2500 tons, and now amounting to but 113,386 tons. The present quotation amongst second-hand sellers of pigs is 44s. for No. 3, but some buyers have succeeded in making purchases at 43s. 10½d. Makers' price for No. 3 is 44s. 6d., and for No. 4 43s. 6d. is quoted. Warrants are being offered at 43s. 9d., with buyers at about 3d. less. A very good demand is reported for manufactured, and prices keep firm.

The present quotation for ship-plates is 6*l*. 15s. to 7*l*., and for bars 6*l*. 5s., angles being quoted at 6*l*. 2s. 6d. per ton. The Wolverhampton market is reported firm, and the tendency of prices is upwards. Consumers show a good deal of disposition to effect purchases, and some large contracts have been made. For forward delivery dearer rates are being quoted, and a rise of 2s. 6d. to 5s. is recognised in many classes of iron. Medium bars are quoted up 2s. 6d., and sheets and boiler-plates are 5s. dearer, while most classes of pigs are also somewhat higher. An animated feeling is reported on the Birmingham market, and prices for most descriptions of iron have been further advanced, there being a brisk enquiry at the improved rates. Northampton pigs are up 2s. 6d., the present figure being 47s. 6d., against 45s. a week ago. There is a steady demand for ordinary bars, but a very active enquiry exists for sheets for both plain and galvanised, the latter being quoted 10s. per ton dearer. The state of trade at Sheffield is said to be in a very satisfactory state, and the various mills are briskly engaged, and an extensive demand prevails for ship and boiler plates. There is a very fair business doing in the Welsh districts, and prices all round keep firm. Advices from New York of the 8th inst. do not report a very large business doing in America, the market there being without change of any particular importance. Old rails being in slightly better demand have recovered the fall of the previous week, while the enquiry for scrap iron has also slightly improved.

TIN.—The turnover of this metal continues large, and during the present week prices have continued to steadily advance. What business has been done has been principally for sharp cash, the demand for forward prompts not being very brisk. Prices for forward parcels have been nominally quoted not fully up to the usual difference betwixt cash and forward lots, but operators for the most part evidently prefer to limit their purchases to what is known as sharp cash contracts. At the same time, although buyers do not appear to care about paying the official rates quoted for forward parcels, yet sellers show no desire to give way, and this is another reason why business in cash has been brisker than that for forward delivery. It is not so much that there is a lack of confidence in the future stability of the market, but in a market of so fluctuating a character operators prefer to turn their purchases over quickly. There is still a very fair business doing for consumption, and although it is small compared with that for speculation yet it is sufficiently large to make some marked impression upon the present light stocks, which necessarily tends to give a good deal of support to the market. To-day the market has been animate, and buyers for forward as well as cash has been more spirited. Prices have further improved, while the deliveries for the first half of the present month are said to be very good.

SPELTER is steady at 17*l*. to 17*l*. 2s. 6d. for ordinaries and 17*l*. 5s. to 17*l*. 10s. for specials.

LEAD.—Not much doing; Spanish buyers at 13*l*. 17s. 6d., sellers 14*l*. English is quoted at 14*l*. 2s. 6d. to 14*l*. 5s. per ton.

STEEL.—A fair business is doing at steady prices.

TIN-PLATES.—A very fair trade has been doing, but prices being low the business transacted is said not to have been very remunerative.

The MINING SHARE MARKET, sympathising with the firmness of metals and the anticipated rise in tin, lead, and copper, has been rather more active this week, but the dealers have been chiefly occupied in the settlement of the fortnightly account. The mines dealt in have included Dolcoath, Cook's Kitchen, East Pool, Tankerville, West Caradon, New West Caradon, West Kitty, Gunnislake (Clitters), Langford, Great Laxey, East Blue Hills, West Crebor, Wheal Crebor, and a few others.

TIN has been firmer, and the general opinion is, that owing to the demand in America, prices will rise. Blue Hills are quoted 1¼ to 1½; Carn Brea, 10 to 11; Cook's Kitchens have advanced to 42 to 44. Dolcoath largely dealt in at 76 to 78; East Pool, 53 to 54; East Lovel, 1 to 1⅛; East Blue Hills, 9s. to 11s.; Drakewalls, ¼ to ⅜; Killifreth, 5 to 5½; Kit Hill, ½ to ¾; New Kitty, 2¾ to 3; North Blue Hills, 3s. to 5s.; South Condurrow, 9 to 9½; West Basset, 9¼ to 10; West Frances, 10 to 10½; West Peevor, 12 to 13.

South Frances 12½ to 13 (call paid); the accounts at the meeting when a call of 1*l*. 12s. 6d. per share was made showed a loss of 6268*l*. and an adverse balance of 7068*l*.; the tin sold realised 3018*l*. 2s. 3d.; in addition to the call it has been resolved to consider a proposition for increasing the number of shares from 4500 to 6000, and to issue the 1500 at 9*l*. 2s. 4d. per share, so as raise 13,500*l*. Wheal Agar, 16½ to 17; Wheal Basset, 10 to 10½; Wheal Grenville, 10 to 10⅜; Wheal Jane, 1 to 1¼; Wheal Kitty (St. Agnes) 2 to 2¼ Wheal Peevor, 6 to 7; Wheal Uny, 5 to 5¼; Wheal Owles, 7 to 8; at the meeting the accounts presented showed a debt on the mine of 5110*l*.; no call was made, but the purser informed the shareholders that there was "tin enough in the mine to pay it." This is so far satisfactory; but reliance upon it for back debts is scarcely in accordance with the Cost-book System of mining, which is just now on its trial. West Poldice, 4 to 4½; at the meeting the accounts showed a debit balance of 2195*l*., and a call of 5s. per share (1297*l*.) was made The tin sold realised 2206*l*.; copper, 78*l*. West Kitty, 14½ to 15½; the 72 east has improved to 12*l*. per fathom. The 60 east, 30*l*. per fathom. The mine is improving in other points. Trevaunance, 2¼ to 2⅜; West Godolphin, 1½ to 1⅝. South Crofty 12½ to 13; at the meeting it is expected that a call of 7s 6d. per share will be made. Tincroft, 12 to 12½; Goodevere, 1⅛ to 1⅜; New Trumpet, 1 to 1¼; Phœnix, 3½ to 3⅝ Wheal Jewell, ⅛ to ¼.

COPPER has been firmer at an advance, and there is a better feeling towards copper mines, though not much doing at present in shares generally. Bedford United are quoted 2⅛ to 2⅜; Carnarvon, ⅜ to ½; Devon Great Consols, 4¾ to 5¼; Devon Great United, ½ to ¾; Gunnislake (Clitters), 3⅞ to 4⅛; Langford Copper, ⅜ to ½; Marke Valley, ⅜ to ½; Mellanear, 4½ to 5; Mona, 4½ to 5; Mona Consols, 1 to 1⅛. New West Caradon in request at 3s. to 5s. Prince of Wales, 6s. to 8s.; South Devon United, ¾ to 1. West Caradon in demand at ⅜ to ½. West Crebor, 8s. to 10s.; West Seton, 17 to 18; West Tolgus, 17 to 19. Wheal Crebor, 2⅛ to 2⅜; a good improvement has taken place here, and the lode in the 48 east has been cut beyond the cross-course; worth 20*l*. per fathom. North Penstruthal, ½ to ¾; the agent reports that the lode in the 120 west is 5 ft. wide, and worth for tin 6*l*. per fathom. Parys Copper, 6s. to 8s.; the sampling here is 211 tons of copper ore, and a large quantity of ochre has been sold. South Caradon, 12½ to 15; there is said to be a fine course of ore in the 160 east. Devon Friendship, 4s. 6d. to 5s. 6d.; they have holed the rise in back of 30 to the winze, and began to drive east and west to open more ground. Sortridge, 3s. to 5s.; the wheel is complete, and the stamp axle and frames erected, so that returns of tin will soon be made. West Devon, 5s. to 10s.

LEAD MINES continue very quiet, and quotations are merely all nominal. Vans are quoted 5½ to 6; Great Laxey, 18 to 19; Roman Gravels, 8½ to 9. D'Esresby Mountain, 1 to 1½; the sale of lead here, 20 tons, realised 9*l*. 5s. per ton. The mine is opening out very satisfactorily. Tankerville Consols, 5s. to 7s. 6d.; through some miscarriage by post the report last week was not received till Saturday morning, too late to appear in the *Mining Journal*. They have a good discovery in the north lode, in the 232, and the mines altogether looking better. East Roman Gravels, 10s. to 12s. 6d.; no change here. South Darren, 15s. to 20s.; they have sold 45 tons of silver-lead ore for 633*l*. 7s. 6d. Frongoch, 1¾ to 2½; the mine has sampled 150 tons of blende, and will have a similar parcel ready before the end of the month. Goginan, ¾ to 1¼; Grogwinion, 1¼ to 1⅜; North Grogwinion, ¾ to 1¼; Ystwith, ½ to ¾; Gwern-y-Mynydd, ⅞ to 1; Goddard's Lead, 1¼ to 1⅜; Gorsedd and Merllyn, 2½ to 3; Great Holway, 5 to 5½; Herodsfoot, 4s. to 5s.; Leadhills, 3¼ to 3½; Pennant, 4½ to 5; Pen-yr-Orsedd, 10s. to 15s.; Sinclair, 1 to 1½; West Holway, 1 to 1½; West Lisburne, ¾ to 1.

FOREIGN MINES.—Akankoo, ¼ to ½; Alamillos, 1½ to 2; Almada and Tirito, ½ to ¾; Anglo-African Diamond, 3 to 5; Broadway, 1½ to 2; Cape Copper, 52 to 54; Cape of Good Hope Diamond, ¾ to 1¼; Chile Gold, ½ to ¾; Colorado United, 1½ to 1⅝; Copiapo, 3½ to 4, ex div.; Devala Central, ⅜ to ½; Devala Moyar, 1 to 1⅛; Fortuna, 3½ to 3¾; Frontino and Bolivia, 2½ to 2⅝; General Mining, 5 to 5½; Indian Consolidated, 11-16ths to 13-16ths; Indian Glenrock, 1 7-16ths to 1 9-16ths; Indian Phœnix, 1½ to 1⅝; Indian Trevelyan, 11-16ths to 13-16ths; Kapanga, ¾ to 1; La Plata, 2 to 2¼; Linares, 3¼ to 3⅜.

Mason and Barry, to bearer, 17½ to 18; Mysore Gold, 7-16ths to 9-16ths; New Quebrada, 4¼ to 4⅜; ditto, debentures, 93 to 98; Nouveau Monde, ¼ to ½; Panulcillo, 6¾ to 7¼; the directors have resolved to distribute on Oct. 10 an interim dividend of 6s. per share free of income tax, or at the rate of 15 per cent. per annum out of profits, for the half year ended June 30, to shareholders on the company's register on Oct. 3, leaving (subject to audit) about 6000*l*. to be carried forward. Potosi, ⅜ to ½; Rhodes Reef, 15-16ths to 1 1-16ths; Rio Tinto, shares to bearer, 26 to 27; the company announce payment of drawn bonds and coupons on Oct. 2 on their 5 per cent. issue of 1880; these should be presented at once. Ruby and Dunderberg, 1⅜ to 2¼; Sierra Buttes, 1⅜ to 1⅝; ditto, Plumas Eureka, 1¼ to 1⅜; South East Wynaad, 2¼ to 2½; Wentworth, ½ to ¾; Wynaad Perseverance, ¾ to 1.

Bratsberg, 1⅛ to 1¼; Organos Gold, 2¾ to 3¼; Richmond, 7¼ to 8; Placerville, 1 to 1⅛; Yuba River, par to ⅛ prem.; Michipicoten, ⅞ to 1⅛; Tolima, 2¼ to 2⅜; Colombian Gold, 8s. to 10s.; Canada Gold, ½ to ¾. Orita shares have been allotted, and dealings have taken place at ⅜ to ⅝ prem.

The Market for Mine Shares on the Stock Exchange showed considerably more animation at the beginning of the week, but on Wednesday and Thursday there was a lull, from which, however, there was a complete recovery to-day, and the market closes firm. It will be seen from the metal market report that the prospects of tin and copper are highly encouraging, and the feeling with regard to lead has also improved. The "business done" column of to-day's Official List is better filled than it has been for some time past, and good prices are in most instances recorded. The Mount Bischoff (Tasmania) Tin Mining Company's half-yearly report to June is to hand to-day, and will be fully referred to next week. The output of Tasmanian tin continues satisfactory; 1124½ tons of ore, containing 788 tons of fine tin were obtained by the company in question during the six months. The company's undivided profit was 95,739*l*., out of which 48,000*l*. was paid in dividends, 1800*l*. for dividend tax, and 45,939*l*., was carried forward. It is really surprising considering the excellent reports constantly coming to hand from Australia, New Zealand, and Tasmania, that British capitalists have hitherto given so little attention to the development of the mineral resources of those countries, which offer a large and promising field for enterprise.

Our usual telegram from Cornwall says—There is no particular feature to report this week in the Cornish Mine Share Market. Prices have undergone but little change, and only a moderate business has been done. At Marke Valley yesterday a new 36-in. cylinder pumping and stamping engine was stated, with a view to the vigorous working of Wheal Jenkin part of the sett, where a tin lode, worth 40*l*. per fathom, has been discovered. At South Crofty to-day a call of 7s. 6d. per share was made. Tin quoted at 106*l*. 10s. cash, first charge. Carn Brea, 10½ to 11; Cook's Kitchen, 43 to 43½; Dolcoath, 78 to 78½; East Pool, 53⅜ to 54; Killifreth, 5 to 5½; Mellanear, 4⅜ to 5; Pedn-an-drea, 3⅜ to 3½; South Crofty, 13 to 13½; South Frances, 12½ to 13; Tincroft, 12⅜ to 13½; West Kitty, 14½ to 15 Wheal Agar, 17½ to 17⅝; West Seton, 17 to 17½; West Tolgus, 17 to 18; Wheal Grenville, 10 to 10½; Wheal Peevor, 6 to 7; Wheal Uny, 5 to 5⅛.

In Indian Gold Mine shares there has been no material change. The transactions have been fairly numerous, but in many cases slightly lower prices have had to be accepted.

In Electric Light Companies shares not only has there been more business doing but prices are decidedly better. Brush Parents are now 11⅜ to 12½; Australian Electric, 1⅜ to 2⅛; Hammonds, 7⅛ to 7⅜; Pilsen-Joels, 1⅜ to 2⅛; and Swan Electric, 2 to 2½. With regard to other concerns there is also a better feeling.

Devon Great Consols, 5 to 5⅛; in the cross-cut north at the 137 east the lode has been intersected and cut into, about 1 ft. wide. It presents a very promising appearance, containing some copper ore of good quality. The various levels, &c., still continue without alteration. Devon Great United, ½ to ¾; greater speed is being attained in the driving of the rock-drills; the underground workings still continue as for some time past; another level, the 75, will be at once commenced.

East Wheal Rose, 13-16ths to 15-16ths; it seems that there have been large dealings in these shares during the past week causing a great scarcity of stock. The important improvement in Innes' lode, and the rapid forking of the mine appears to be attracting considerable attention.

South Devon, ⅞ to 1; the agent reports that the 110 continues large, and is producing some very good stones of ore, of a well-defined character, likely to lead to some valuable discoveries. Pixton's shaft is now down 10 fms. below the 140. The mine is looking well throughout. The half-yearly meeting will take place on Wednesday next.

Mounts Bay Consols, ½ to ⅝, and the market for them is said to be showing a firmer tone. It is reported the lodes in the deeper levels have improved.

Drake Walls, ¾ to ⅞; the sale on Sept. 8 of black tin realised 617*l*. 0s. 9d. Mathews' shaft has been made secure, and the work will now proceed satisfactorily. Kit Hill, ½ to ⅝; the distance driven in the tunnel level during the past week has been 3 fms. 2 ft., making a total distance of 98 fms. 3 ft driven, the north engine-shaft having reached the depth of 15 fms. 2 ft. 4 in. below the 62.

Old Shepherds, ¼ to ½; and there is said to be more enquirers

for shares. The report states that the water is lowered more than 50 fms. from surface.

Tresavean, 9-16ths to 11-16ths; Caddy's lode is reported worth 20*l.* per fathom.

Phœnix United, 3¼ to 3½; the pursers send telegram to-day:—We are pleased to state for the information of distant shareholders that these mines have further improved since the meeting.

Richmond, 7½ to 8; the usual telegram from the mines states that the week's run was $23,000 from 530 tons of ore with one furnace. During the week the refinery produced doré bars to the value of $22,000. The superintendent's report details the dead work for the week ended Aug. 21. The 1050 drift station is progressing satisfactorily in quartzite.

Ruby and Dunderberg, 2 to 2¼; new, ¾ to 15-16 prem.; the usual weekly report advises that the main shaft had been sunk altogether 138 ft. below the 700 ft. level. It is not intended to sink any lower, but a drift has been commenced at the bottom towards No. 8 ore body, this drift will hereafter be known as the 800 ft. level. Nothing fresh in the other parts of the Dunderberg Mine. The work at the surface of the Home Ticket is going on satisfactorily without much change. The shipments of ore from the two mines for the week amounted to 19 tons.

California Gold (Colorado), ¼ to 1¼; the telegram from the mine on Tnursday states that the mill run for the second week, after beginning crushing, was 178 tons; net value $1500 (300*l.*). and that the ore sales amounted to $2000 (400*l.*), The shares are reported to have been in active demand during the week, and a large number have changed hands.

The New Emma shareholders will be glad to learn that their mine is now being placed in condition to again become a great ore producer, and as the property is said to have already produced nearly 1,000,000*l.* worth of ore. The Bay City Tunnel, now owned by a St. Louis company, is, says an Alta letter to the Salt Lake Tribune of Aug. 17, run in the hill, and cuts the Emma 150 ft. below the old workings. This tunnel has a length of 1700 ft., the heading being 280 beyond the hanging-wall of the Emma vein. The New Emma Company have secured a lease of this tunnel for 10 years, for which they have to pay a royalty of $1 per ton upon all the ore taken out of the mine. At present the property is being improved and put in shape for mining upon a large scale. At the inner end of the tunnel a chamber has been cut to make an engine-room 20 by 24 ft., and 10 ft. high, a shaft-room 20 by 20 and 22 ft. high. A two compartment shaft 5 by 12 ft. is now down some distance, and is being pushed as rapidly as three shifts of eight hour men can sink through the hard rock. When they have reached a depth of 200 ft. below the tunnel, a drift of 40 or 50 ft. will tap the vein at that depth, and the pumps to be placed in will be ample to drain the mine. This mode of working the property became a necessity because of the amount of water encountered on the vein in the incline from this tunnel, which incline had reached a depth of 150 ft. when the workmen were driven out by the body of water struck. This incline is now filled with water, which flows from the top, and what is singular, the water is so clear that the tramway in the incline can be seen fully half the way down. In operating the mine, steam will be taken through pipes from the boilers at the mouth of the tunnel to operate the pumps and hoisting-works at the shaft. Two boilers of 60-horse power capacity each are to be added to the two 50-horse boilers now in place, and these with the pumps and engines, are all expected to be in operation in about four months from now. George Cullens is superintendent for the New Emma Company, and at present 22 men are employed on the property. The buildings and machinery have all been removed from the old shaft to the mouth of Bay City Tunnel. There are some strange features about the Emma property and workings on the ground now owned by the company. In the early days of the Emma the dump pile became enormous, and contained so much good ore that later managements began washing to concentrate the ore. The waste dump has been washed time after time, first by running ditches along the side of the mountain for this purpose, and afterwards hauling the dirt to the stream. These washings have been done on royalty, and the dirt is still paying more than working wages to the miners. Ore concentrated at the Emma ranges in value from $76 to $190 per ton. Two men have shipped 44 tons the past four months, and have 13 tons more to send off, the result of their labour.

Potosi, ⅝ to ¾; the general meeting is called for Sept. 28. The balance-sheet for the week ended Dec. 31 having been already circulated, the directors present a further statement of the accounts and operations of the company up to June 30. Comparing the results of the two half-years' workings, it appears that from Jan. to June, 1882, the quantity of ore crushed has been very considerably greater, and the produce larger than for the same period in 1881—4854 tons, as against 3315 tons, and 23,718*l.* as against 19,845*l.* The unfortunate accident to the locomotive in April last prevented these results from being considerably increased. The yield, however, of the quartz dropped from 1·595 in 1881 to 1·285 in 1882, or the result would have been 6000*l.* better. The expenditure has been reduced by 10,000*l.* in the same period, notwithstanding the large increase in the quantity of quartz raised and milled, and the current half-year is expected to show an equally favourable result in this respect. Every effort is being made to push forward the machinery for working and opening up the Peru lode. It is to this portion of the company's property that the shareholders must look for remunerative results, and it must be remembered that the value of this lode may be said to be now satisfactorily established. It should also be pointed out that some of the expenditure during this year has been in respect of the opening out of the Peru lode.

In Lead Mine Shares there is not much animation, although a fair number of transactions have taken place, and quotations are fully as high as last week. Roman Gravels, 8½ to 9½; the agent reports that the lead ore producing points continue to look well, and the usual sampling will take place on Thursday next. The new winze in the 110, north of the new engine-shaft, is now down about 4 ft., and the part of the lode being carried is worth 1½ to 2 tons per fathom.

Tankerville, ⅝ to ¾; these shares are reported to have been in demand lately, owing to the excellent report made by the manager last week, and confirmed by him in the report of to-day. The workings at Potter's Pit have not looked so well since started by the present company. Leadhills, 3½ to 3¾; the mine continues to look well and there has been a good demand for the shares.

North Grogwinion, ¾ to 1½; the latest accounts to hand from the mine are stated to be of a satisfactory nature, and excellent progress is making in all departments, both at surface and underground. The recent change in the ground about the lode at the 36 appears to have had a very beneficial effect upon its ore-producing character.

Goginan, ¾ to 1¼. The latest accounts to hand state that everything is going on well in all departments. The opening out of new ground continues uninterruptedly, and further discoveries are being made. The mine will shortly sell another 50 tons of silver-lead ore.

The Council of Foreign Bondholders notify that the deposit tickets of the Turkish Debt Registration, numbered up to 2084 inclusive, can now be exchanged for the Registered Securities at their offices.

With reference to New Terras, Capt. T. Edwards, of St. Stephens, writes that he and five others worked in a stope near the winze, from which they broke 3 tons 10 cwts. of tin in a month, and the lode in the winze is much richer than where they worked. There is room for 18 to 20 men to work on this rich lode, and the returns can easily be calculated. He has been working miner and mining captain for over 40 years, and in all his experience he does not know of a richer property.

The estimated traffic receipts of the New York, Pennsylvania, and Ohio Railroad Company for the third week in August amount to $127,769, against $115,653 for the same period last year, showing an estimated increase of $12,116.

Messrs. C. de Murrieta and Co. give notice that the dividends due, Oct. 1. on the Buenos Ayres Six per Cent. State Loan, 1870, will be paid at their counting-house on and after Oct. 2. The bonds amounting to 19,700*l.*, already drawn for redemption will also be paid at the same time.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—City of London Marine Corporation (Limited), 1⅜; ditto Fire, 1 5/16; Employers' Liability Association Corporation (Limited), 3; Fire Insurance Association, 3 5/16; Guardian, 68; London and Lancashire Fire, 60½ to 60¾; London, 60½ to 60¾; Merchants' Marine (Limited), 1¾; Marine (Limited), 27½; Royal Exchange, 424 to 425; Standard Fire Office, 2½ to 2¾. Insurance quiet, and little doing, but generally firm.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, has been:—Bahia, 18¾ to 18½; British, 35¾; Continental New, 1869 to 1872, 17¾; European, New, 8¾; Gas Light and Coke, A (ordinary), 174½ to 175; ditto C, 10 per cent. pref, 219 to 219½; ditto H, 7 per cent. max., 132¾ to 134; ditto 4 per cent. Debenture Stock, 105; Imperial Continental, 194¾ to 195¼; London, 214 to 216; Monte Video, 13 5/16 to 12¾; Oriental (Limited), 6⅞; South Metropolitan, A, 205; ditto B, 179½. Gas stocks very steady and firmly held, especially London Gas, the amalgamation with the Gas Light and Coke Company being practically completed.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. ABBOTT, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, Birchin-lane, writes:—*Opening:* So far the news of the capture of Arabi Bey has not stimulated Unified very much, the price being 64⅛ to 64⅜, only ⅛ better than last night. Mexican and Grand Trunk stocks are still suffering from the forced closing of a large defaulter's account. But for the fact of one of the parties concerned having large resources there must have been several failures. Wheal Kitty, 2 to 2½; Organos, 2½ to 3; Panulcillo, 6¾ to 7; Bedford United, 2⅛ to 2⅜; South Devon, ¾ to 1; Wheal Crebor, 2⅛ to 2⅜; Richmond, 7⅛ to 8; South-East Wynaad, 2 to 2⅛.—*Closing:* Unified have been 65, now 64¾; Trunk Thirds are 1 higher at 58; Mexican Old Bonds, 25¼ to 25½; Brighton, A, 121¾ to 121½; Mason and Barry, 17¼ to 18.

Messrs. PIXLEY and ABELL.—GOLD: We have but little to report in gold, there being no enquiry for abroad. The Royal mail steamer Para brought 27,000 from the West Indies. The Bank of England has received 30,000*l.* since our last Circular, and 50,000 sovereigns have been withdrawn. The P. and O. steamer Nizam took 5000*l.* in coin for Bombay, and 2000*l.* for Madras.—SILVER: Our quotation for silver last week was 52⅛d. per ounce standard; the price, however, has since receded, sales having been effected at 51⅞d., but the market is very weak at this rate, which is nominal. The only arrivals are 6400*l.* per Para, from the West Indies, and about 22,000*l.* from New York. The shipments per P. and O. steamer Nizam were 74,000*l.* to Bombay and 7500*l.* to Calcutta; and per Peshawur 21,000*l.* to Bombay.—MEXICAN DOLLARS: About 190,000*l.* in value has reached London, *viâ* St. Nazaire; those were disposed of yesterday at 5⅜d. per ounce, chiefly for refining purposes. The P. and O. steamer Peshawur, leaving this day, takes 23,200*l.* to Penang.

The directors of John Vernon Hope and Co., in their first annual report, state that after providing for all bad and doubtful debts 12 per cent. will be paid upon the ordinary and 8 per cent. upon the preference shares, in addition to which 10 per cent. has been written off all the stocks, 17½ per cent. off the buildings and land, and it is proposed to place 1000*l.* to reserve, and carry forward 1753*l.* to next account.

A petition for winding-up the Millinery and Dress Association is to be heard on Sept. 20.

Petitions for winding-up of the Georgia Land, Lumber, and Colonisation Company, the Hoover Hill Gold Mining Company, and C. W. Meiter and Co. are to be heard on the 20th inst.

EAST WHEAL ROSE.—The report in to-day's Journal from this mine is the most important yet received since pumping commenced. It states the mine is now drained throughout to the 30. We still believe the shafts will be found in good condition to the bottom of the mine, and this good condition and the great speed being made in forking the water with one engine, is a clear proof that the draining and clearing of this mine is nothing near so great as many people tried to make it appear. And when the bottom of the mine is reached the large quantities of lead ore which will be obtained will be even more surprising to the outside public. It is also stated that Innes's lode has been found on the north lode also, and is worth fully 2 tons per fathom, or quite 30*l.* There is a run of several hundred fathoms on this lode in unwrought ground. Some magnificent samples from this discovery are now lying at the company's office.

SINCLAIR LEAD AND BLENDE MINES.—We are glad to announce that this company has completed the sinking of its splendid shaft, and on Monday next drivings will be commenced to cut the famous Milwr lode. Within a month our readers may look for great and important news. Latterly strings and veins of lead have been passed through in the sinking, unmistakable evidence of the richness of the great lode. We may add that throughout the whole sinking operation not a hitch has occurred—no water has been met with; this result may be traced to the splendid walling of stone placed by the manager from the top of the shaft down for at least 15 yards. The machinery has worked admirably. We anticipate and wish the shareholders great success.

MOUNTS BAY CONSOLS.—The copper just sold from the Trebarvah property realised 320*l.* 13s. 2d. Another parcel is being prepared for market. In speaking of the tin lodes discovered at Sydney Cove last week we should have said they numbered 17 instead of seven. Several thousands of tons of orestuff await the completion of the stamps, which are being erected with all speed. Regular sales may be expected at an early date. Browne's lode is improving considerably at the 20, producing good copper and tinstuff.

PHŒNIX UNITED MINES.—These mines have greatly improved. The lode level (western mine) is worth 90*l.* per fathom, and the lode in the 80, west of new engine-shaft, is in whole ground, and now worth 35*l.* per fathom. They have a splendid property here without a doubt, and investors in sound mines should not lose sight of Phœnix United, which has paid 206,400*l.* in dividends, has expended some 200,000*l.* underground, also laid out about 70,000*l.* in surface works, and all upon a capital called up of 72,000*l.* The mine is likely to continue paying dividends for 100 years to come with the present price of metals.

TRESAVEAN.—The drop lift in the engine-shaft has been lowered, and is forking rapidly; it will not take long to drain the mine to the 75, when the large bodies of copper left by the former owners will be available. The No. 3 stope at Wheal Boys shaft is now worth 20*l.* per fathom, and an increased number of hands has been taken on. The tin coming from the stamps is quite satisfactory. Everything at surface and underground is being pushed forward with a view to early and large returns.

GREAT HOLWAY.—The cross-cut from the 60 at level engine-shaft has proved most successful. The lode cut in—at present producing 1½ ton of lead to the fathom—directly underneath the famous run of ore at No. 5 pitch, is worth fully 4 tons of lead to the fathom. This new feature must prove of the highest importance to the well fare of the company. 55 tons of ore will be sold to-day, and further samplings within a fortnight.

MONA MINES.—These shares are in favour, owing to the improved state of the mine. The produce is over 15,000*l.* yearly, and will shortly be greatly increased, when dividends may be looked for.

HERODSFOOT MINE.—The prospects here continue to improve, the mine is looking better than for the past three years. The lode in the 215 level is rich for silver, their last 30 tons sold for 17*l.* 6s. 6d. per ton. One of the most important points in the mine is the 160 level north, which is opening out well; the late improvement still holds good, lode worth 2 tons of silver-lead ore per fathom. This same lode they expect to meet in the 175 level very shortly; thus a valuable section of ore ground will be laid open. The mine is complete in all requisite machinery, and has paid 80,000*l.* in profits on 8700*l.* outlay.

WHEAL JANE.—They have 20 tons of tin for sale, the produce of five weeks' actual working. This mine has not looked so well for some time past, and the proof is in their sales of tin. Shares have been in demand, and are scarce. No further call is expected, but early dividends may now be looked forward to. No mine in Cornwall can show more promising results.

WEST HOLWAY.—The new engine is fixed and started, and answers its purpose admirably. The 125 and 140 levels are in splendid ore.

ORITA GOLD.—The allotment of shares in this company has taken place, and considering the manner in which the concern has been launched (without purchase or promotion money, thus giving the public an opportunity of investing in a mine upon almost the same terms as of so-called pioneers) it is hardly a subject for surprise that the shares to be allotted have been applied for several times over, nor is it surprising that the price should now be at ⅝ to ¾ prem, that is 27s. 6d. to 32s. 6d. per share. Mining is at all times more or less speculative, but hydraulic mining presents more elements of certainty as regards success than any other class of the same pursuit. The reports of the Orita are of no uncertain character, and if all that is reported be correct these mines must undoubtedly prove successful.

NEW QUEBRADA COMPANY.—The annual drawing of the Six per Cent. Debentures took place on Wednesday, before Mr. C. J. Watts, Notary Public, when 37 bonds, amounting to 2900*l.* in the aggregate, were drawn for payment at par on Oct. 2.

KOHINOOR AND DONALDSON.—The usual monthly report of the minesappears in another column. We understand that the shares of this company have been in considerable request during the week. Work at the mines is proceeding satisfactorily.

SEIZURE OF DYNAMITE.—A correspondent at Millom, Cumberland, writes that Lieut.-Col. Ford, one of H.M. Inspectors of Explosives, has seized a shipment of dynamite imported to Whitehaven, Cumberland, Barrow-in-Furness, Lancashire, and Portmadoc, North Wales, in consequence of the impurity of the nitro-glycerine rendering it dangerous. The fact that such seizures are constantly necessary, owing to the almost impossibility of preventing the exuding of the nitro-glycerine, however well and carefully the dynamite may be manufactured, affords additional evidence of the great care that should always be exercised in the transport, handling, and use of so dangerous an explosive, and of the absurdity of supposing that the Explosives Acts can with any regard for the public safety be relaxed.

MINING ENGINEERS AND WHERE TO FIND THEM.—Mr. Alex Del Mar writing from the New London and Brazilian Bank, Rio Janeiro, Aug. 15, complains that an anonymous correspondent of the *Mining Journal* states that he saw him in Paris last November, and Mr. Del Mar wishes it stated that he was in Brazil at the time. He also declares another correspondent is "far out of the record" in what he has stated concerning him. It has been said that "great men can always be measured by the calumnies they are subject to," and Mr. Del Mar would surely not like to be ranked as a little man.

CAPPER PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS,
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.,
and DROSS or ORES containing
COPPER, LEAD AND ANTIMONY.

MANSON, WOODS, AND CARTER,
AMERICAN MINING AND FINANCE AGENTS.
Commissions undertaken personally or by letter.
Titles advised on, and certified abstracts obtained.
Securities registered, and Dividends collected.
SPECIAL BUSINESS IN FIRST-CLASS
MORTGAGE BONDS.
Particulars on application.
BANKERS: LONDON AND COUNTY.
OFFICES: 36, KING WILLIAM STREET, CITY.
Agents for the New York "Mining Record."

ROBERT C. FISHER AND SON,
GENERAL, CONSULTING, AND MINING ENGINEERS,
SWANSEA,
REPORT ON MINERAL PROPERTIES AND MINES,
ADVISE ON ALL QUESTIONS OF THE WORKING AND MANAGEMENT OF MINES.

EDGAR JACKSON
(Associate Royal School Mines),
ANALYST AND ASSAYER,
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and other Ores. ASSAYING TAUGHT.
106, QUEEN VICTORIA STREET, LONDON.

JOHN THOMAS, STOCK AND SHARE BROKER,
REDRUTH, CORNWALL.
Mines Inspected, and Advice given as to Purchase or Sale of Shares.
On the Mining Market over Twenty Years.
Telegraphic Address: "THOMAS, REDRUTH."

WANTED, FIFTY KILLIFRETH TIN MINE SHARES.—Sellers please state lowest price.
H. JONES, care of Mr. Pates, 326, High-street, Cheltenham.

FERDINAND R. KIRK, STOCKBROKER,
5, BIRCHIN-LANE, LONDON, E.C.
Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.
BANKERS: LONDON AND WESTMINSTER, Lothbury.

SAMUEL JAMES, STOCK BROKER AND MINING SHARE DEALER, 14, ANGEL COURT, LONDON, E.C.
Son of Capt. A. T. JAMES, late of South Frances, and other mines;
Member of the Redruth Mining Exchange.
OFFERS FOR SALE, all or part, of the following shares free of commission:—

20 Arendal.	60 Glenroy.	50 South Frances.
50 Bedford.	20 Grogwinion.	100 South Penstruthal.
20 Blue Hills.	35 Gunnislake (Clitters).	30 Tamar.
50 Bratsberg.	200 Herodsfoot.	100 Tankerville
75 Camborne Vean.	25 Hingston Down.	10 Tincroft.
10 Carn Brea.	20 Killifreth.	28 Tin Hill.
5 Cook's Kitchen.	25 Kit Hill, 7s. 6d.	10 West Basset.
200 Cootacovil.	30 Langford.	10 West Fratlees.
100 Coates.	100 Moria Du.	20 West Kitty.
50 Devon Gt. Unl., 7s 6d	200 Mysore Reef.	35 West Devon.
100 Devon Friendship.	25 New Kitty.	10 West Peevor.
100 D'Eresby Mountain.	50 North Busy.	20 West Polbreen.
10 Dolcoath.	100 Norway Copper.	5 West Seton.
30 Drakewalls.	500 Old Owlacombe.	5 Wheal Agar.
55 East Blue Hills.	100 Parys Copper.	15 Wheal Basset.
30 East Buller.	100 Penhalls.	10 Wheal Grenville.
30 East Chiverton.	50 Phœnix United.	25 Wheal Jane.
10 East Pool.	4 South Caradon.	10 Wheal Kitty (St. Agnes).
100 East Roman Gravels.	20 South Condurrow.	50 Wheal Uny.
50 Eberhardt.	100 South Crebor.	25 Wheal Crebor.
20 Frongoch.	10 South Crofty.	150 Wheal Sisters.
50 Gawton.	46 South Devon.	

The present is a favourable opportunity to purchase low priced shares, and I strongly recommend their purchase.
S. JAMES is a buyer or seller of all Home and Foreign Mining shares at close market prices.
Orders by letter or telegram promptly attended to.
Speculative accounts not opened on any terms whatever.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER
9, GRACECHURCH STREET, LONDON, E.C. (Established 29 years)
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.
Notice to Investors and Speculators. Mr. BUDGE has DEALINGS in—

100 Akankoo.	100 Herodsfoot.	10 South Condurrow.
50 Bedford United.	25 Hingston Down.	50 South Devon.
50 Colorado.	100 Indian Consolidated.	50 South Penstruthal.
100 Carn Camborne.	50 Indian Phœnix.	20 South Tolcarne.
150 Devon Friendship.	100 Javali.	100 Tankerville.
100 Devala Moyar.	50 Kit Hill.	50 Tolima A.
70 Drakewalls.	20 Lead Hills.	50 Trevaunance.
100 Exchequer.	100 Langford.	100 West Caradon.
100 East Blue Hills.	25 New Kitty.	10 West Kitty
50 East Caradon.	100 North Blue Hills.	50 West Polbreen.
35 East Roman Gravels.	100 New West Caradon.	40 West Godolphin.
50 Gawton.	30 Organos.	100 West Crebor.
60 Glenroy.	20 Penhalls.	120 Wheal Coates.
100 Gold Coast.	100 Prince of Wales.	20 Wheal Uny.
50 Hoover Hill.	110 Potosi.	

SPECIAL BUSINESS in Trevaunance United Mines, Wheal Agar, West Kitty Dolcoath, South Condurrow, West Caradon, West Godolphin, South Tolcarne.

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years)
Can SELL the following SHARES at prices annexed:—

50 Almada, 13s.	100 Greys Brewery, off. w	75 Prince of Wales, 8s.
25 Bedford Unit., £2 7 6	50 Herodsfoot, 4s. 6d.	50 Parys Corpora., 7s. 9d
40 Bratsberg Cop., £1 17 6	25 Hingston, 15s.	100 Pestarena, 4s. 6d.
40 Bwich United.	100 Indian Kingston, 4s 6d	20 ditto, 10 per cent. pref., 14s. 3d.
50 Colombian Gold, 7s. 6	50 Kapanga, 18s.	50 Potosi, 10s. 9d.
50 Chile Gold, 14s.	25 Leadhills, £3 7s. 6d.	10 Richmond, £7 17s. 6d.
50 Callao Bis, 8s.	25 La Plata, £2 5s.	20 Ruby, £2 2s. 6d.
25 Colorado, £1 15s	15 London and Staff. Fire Insurance £37 paid offer wanted.	100 Silver Peak, 5s.
100 Dev. Friendship, 4s. 9	25 Mona Consols, 23s.	50 South Devon, 18s.
50 Drakewalls, 8s. 9d.	50 Mounts Bay.	50 Sortridge Con., 4s.
50 East Blue Hills, 9s. 6	50 North Blue Hills, 4s 3d	100 Tankerville, 7s.
50 English-Australian Gold, 7s.	50 Nouveau Monde, 7s. 6	50 West Crebor, 9s. 6d.
50 ditto, pref., 22s. 6d.	25 New Kitty, £2 16s 3d.	50 West Lisburne, 15s
50 East Rose, 13s. 9d.	10 National Liberal Land Co. (Limited), £5 shares, £2 pd., o.w.	40 West Devon, 5s. 3d.
68 Gold Coast, 23s. 6d.	20 Organos Gold.	40 West Caradon, 11s. 3
20 Gunnislake (Clitters), £4 2s. 6d.		10 West Kitty £15½.
		25 Wheal Crebor, £2 7 6

Shares in Home, Foreign, and Colonial mines, bought and sold at net market prices, free of commission.
Purchases for forward delivery at special prices on receipt of deposit of 20 per cent.
SPECIAL BUSINESS in Indian gold mines, also in rails, trams, Egypts, Ottoman Banks, Turks, and Lombards, for cash or account on receipt of usual cover.
BANKERS: ALLIANCE BANK (Limited).

ABBOTT, PAGE, AND CO.,
STOCKBROKERS,
42, POULTRY, LONDON, E.C
The upward tendency of the Metal Market is causing the price of all good Home Mining Shares to rise rapidly.
WE RECOMMEND, amongst others, for an immediate large rise, the shares of—
EAST WHEAL ROSE.
TRESAVEAN.
MOUNT'S BAY.
OLD SHEPHERDS.
HOME MINES TRUST.
All fully paid.
A., P., and Co.'s Circular will be sent post free on application.
Their last month's recommendations resulted in large profits to their clients. The recommendations in the present Circular will, no doubt, be equally correct.
Business transacted at low commissions in all descriptions of Stock Exchange Securities.

Notices to Correspondents

** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt; it then forms an accumulating useful work of reference.

COMPANIES LAW.—Could you inform me in Answers to Correspondents: 1.—If when a company is brought out, and that only a very small part of the shares are applied for, the directors are entitled to proceed to allotment and spend the money subscribed for the purpose of working the company, although they may not have sufficient to pay the vendors' instalments as purchase-money? 2.—Can they do this without closing the list, and (though they have stated in their advertisements that it will be closed on a certain day) keep it indefinitely open after that date? Surely it is not right if only a few persons subscribe towards a large amount of capital, to spend all their money on what has proved (as far as getting the necessary capital is concerned) a failure?—W. S.—*Calvados, Sept.* 13. [There is, unfortunately, nothing in either of the Companies Acts to prevent promoters allotting "to save the directors," when comparatively nothing is subscribed; so that the subscribers of 100*l.* in a concern with a nominal capital of 100,000*l.* sometimes find after allotment that their money is all the company ever possessed.

Received,—"D." (San Pedro, Chili) should have signed his name to the letter he wishes us to publish—"T. A. W."—S. Rickard (Tucson, Arizona)—"C. E. B."—F. Ellershausen (Hancock, Michigan)—"S. B."—"M.E."—"F.F." (Great Yarmouth)—"E. H."—"T. J. H"—"R. S." (Truro)—"J. B. F." (Richmond)—"H. H. W." (Pelyn Wood Mine)—"Shareholder" (Devon Great Consols).

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, SEPTEMBER 16, 1882.

WIRE TRAMWAYS FOR MINES, &c.

Amongst the inventions which have been introduced for the economical transport of minerals, as well as of other material, that relating to wire tramways is well deserving of attention. At home there may not be so much necessity for these singular tramways as there is abroad, seeing that most of our mines are either directly connected with lines of railway or are only a short distance from them. But we know many places where the system could be most advantageously employed in taking minerals from mines to a railway. There are mines connected with one line of railway, but only a mile, or perhaps a little more, from a second one, so that, were the tram system adopted, there would be two systems available instead of one. There are also mines having sidings to a railway, but only a comparatively short distance from a canal; and here, again, a junction could easily be effected, and we well know that carriage by water is much less than it is by railway. Where mines are worked at a considerable elevation, and the output has to be delivered in the valley, the wire tramway appears to great advantage, seeing that it does not depend upon the gradients the same as a railway as to the cost of construction. In some districts the lines are constructed where a railway would be out of the question owing to the nature of the ground. In North Wales we have been at lead mines a considerable distance from any railway, where, to our thinking, the suspended wires could be most advantageously employed, not only for sending down the material, but for carrying up the stores as well, and that most expeditiously. In connection with the iron ore mines near to Bilbao, in Spain, there are the suspended wires in full operation, and have been doing duty for some considerable time past in conveying the stores from the works, and, of course, returning with what is required for mining operations. It appears that the wires can be made to do duty for miles in length, there being one series, we are told, upwards of ten miles in length, which has to cross a river of considerable breadth. This in itself is a matter of considerable importance, and in some instances would be even more valuable than a railway, which could not well be made to cross a river a mile or two in breadth in a country far removed from civilisation and where labour is scarce.

In the loading of vessels where they cannot come up to the shore, as is the case in many parts of the world, the tramways suspended can be made available for loading with expedition. At one place coal is taken from a considerable elevation down to a seaport for shipment, so that there is no necessity for stopping before the mineral is discharged into the hold. Indeed the uses to which the wire tramway can be economically applied are both varied and numerous, not being confined to what may be termed railway purposes. At home they are now in operation at several of our docks and works, doing away with a vast amount of hand labour, and affecting a considerable saving in that respect. They connect the shafts of mines that are at a distance from each other, remove the refuse of blast furnaces away from the works, convey crops from farms to towns and seaports, and, in fact, transport goods and minerals of every description from larger or shorter distances at a very moderate cost. The motive power, as a rule, is available at the places where the trams are used, for at mines and large works steam has to be used for ordinary purposes, and this, of course, can be made available for the working of the wires, so that there is not much expense in that direction. With the many advantages pertaining to the suspended wire tramways in connection with mining and other operations, as well as its cheapness, we believe that attention has only to be drawn to the system to ensure for it greater recognition than it has yet received from our mining engineers, manufacturers, and others both at home and abroad, and who seek for the maximum of efficiency at the minimum cost.

CONTINENTAL COMPETITION.

The great steel and iron manufacturers of this country have long since felt, from sad experience, the effects of the severe competition existing in the make of goods for the world's markets. England can no longer depend upon the prestige which in former days won for her renown in opening up fresh channels for her industries, and which gave her almost a monopoly in the supply of the staple manufactures of the world. Nor is the excellence of the article supplied and the stability of the workmanship considered now-a-day of such vital moment as in times gone past, when British manufactured goods commanded an advance of some 15 or 20 per cent. over that of Continental and American make. Cheapness of production rather than durability and excellence is now the ruling essential, and the cheapest article in the market now carries off the victory. And it is in this respect the English manufacturer finds himself at the mercy of the European and American firms, and to a great extent practically excluded from the great commercial race. We still claim for English steel and iron rails and bars and general manufactured goods a decided superiority over those of foreign nations, but it would be idle to contend that with regard to the price at which such goods can be profitably sold, we can contend with the German or Russian firms, where wages is scarcely more than half those paid in England. It is no secret that the Germans and Belgian manufacturers are at the present moment making prodigious efforts to obtain from us the lion share of the Australian and Pacific trade in the supply of steel and iron rails and manufactured goods, and the placing of no less than 30,000 tons of steel rails required for the Victoria Government to the well-known Continental iron and steel manufacturers during the past few days, shows that the competition is one which cannot be ignored or disregarded. This is, in addition to a large contract given to a German firm some month or so ago. It is understood that the Messrs. Siemens, of the Landore (Swansea) Steelworks, and other large manufacturers, were competitors, and to speak significantly, if not elegantly, it is a decided "slap in the face" to English manufacturers to find that they have been beaten in their own colonies by Germany firms. The extensive order above mentioned has just been secured by Messrs. S. Cleve and Co., Melbourne, for a well-known firm of German, the price being 6*l.* 11s. 6d. per ton. Thus, whilst hundreds if not thousands of lucrative and responsible offices in connection with our metal and other manufacturers are filled by German and Continental assayers, chemists, &c., England is beaten in the commercial race by Continental firms where wages are lower, and where trade and manufacturers are not hampered and restricted by many of those enactions which hang like mill stones around the great staple industries of this kingdom.

The *Mining Journal* has never professed to be influenced by political considerations, our great object being the interests of the mining and staple industries of the kingdom. Still the Protectionist party have certainly a most powerful argument in favour of their policy when they look at what is daily transpiring in Germany. The advocates of Free Trade have always contended that Protectionist States could not compete in neutral markets with free-impost countries, and it is further alleged that the policy of Count Bismarck is causing much distress amongst the industrial and manufacturing classes by its protection. How will these Free Traders reconcile their theory with the perforce acknowledged fact that Germany has just beaten English manufacturers out of the market in such an important staple article as 30,000 tons of steel rails? Facts are stubborn things, and it is a question of vital moment to comprehend why the above contract has been given to a continental State, and that State being a Protectionist one. English manufacturers, and English workmen too, must look these these steadfastly in the face. Whatever may be said to the contrary, and however much some people may endeavour to pooh-pooh the statement, the fact remains that we are being rapidly beaten out of the field even in the supply of steel and iron manufactured goods in our own colonies. We all know that as a nation of manufacturers we are handicapped with restrictions in the shape of Factory and Workshops' Acts which do not exist in their severity in either the continental or American States, whilst the Free Trade policy of the Cobden Club is a very questionable one. The Trades Unions, too, in their combined action, are strong enough to keep up a scale of wages incompatible with German and European competition, and apparently they disregard the fact that the solid ground of good workmanship and general excellence of manufacture, upon which they once legitimately prided themselves, is fast slipping from under them. But such is the case. England can scarcely hold its own, and the fact that another so important a contract as 30,000 tons of steel rails for our own colonies has been given to a German firm is to say the least a most significant warning. And yet, in spite of these facts, the extensive and important steelworks of the Messrs. Siemens, situated at Landore, Swansea, are at the present time at a standstill, because the workmen are haggling about a few shillings wages, and persisting in keeping their furnaces idle from Saturday afternoons to Monday mornings, being 1000 or 1500 hands on strike. We have no desire to take a pessimistic view of our to-day's manufacturing position; we still believe in our supremacy as a nation, all things considered; but the sooner manufacturers look in the face such sturdy facts as that they are supplanted in their own colonies by foreign nations in such important orders as 30,000 tons of steel rails, and the sooner the British workman recognises the importance of such a fact, and knuckles down to the inevitable, the better for all parties concerned. The nation will never go back from its Free Trade policy; all we can do as manufacturers and workmen is to accept the position and act accordingly.

THE THREATENED STRIKE OF MINERS.

The resolution come to at the Miners' Conference at Manchester to the effect that, if the colliery proprietors refused to give an advance of wages on or before Oct. 1, there should be a general stand of all the miners throughout the kingdom, as we anticipated would be the case, will terminate in a thorough and complete collapse. This is evident from the position taken by the executive of the Northumberland Miners' Association, one of the most powerful bodies connected with the working miners in the kingdom, and who have just issued a circular repudiating the decision come to at the Conference. From it we get an insight into the true condition of several of the mining associations throughout the kingdom, which shows that their strength is far below what they have made known it to be in the press. At the Conference lately held at Manchester, the delegates from the West Riding Association were said to represent 45,000 members, which now turns out to be a fiction, for we are told in the Northumberland circular that out of nearly half a million miners employed in and about the mines of Great Britain only 68,000 were represented at the Conference. We are further informed through the same medium that the motion of Mr. Pickard, the delegate from the West Riding Association, for a general stand of all the coal miners in the kingdom unless an advance of wages was conceded, was only supported by 17 delegates, representing only 17,000 members. This brings down the 45,000 said to be represented by Mr. Pickard to a very low figure indeed, and it would be nearer the mark were either of the first two figures taken away. The minority of 14 votes, however, it is stated, represented 51,000 members. From these figures, that have only oozed out under exceptional circumstances, it is evident that even the so-called National Conferences of Miners are not so formidable as they have been considered by the outside public. In the North of England the men have been working under a sliding scale that will be in force for a considerable time to come, and it is evident from the circular just issued that the miners will not carry out the resolution come to by the Conference.

In Yorkshire itself, one of the representatives of which at the Conference was the author of the resolution, it is evident that comparatively few of the men will strike, no matter how forcibly they may be urged to do so. There may be some quite willing to go out for a time, provided they are supported whilst walking about, but then there is no fund behind them for such a purpose. But we find there are two Miners' Associations in the West Riding that take opposite views as to the means of advancing wages, so that whilst the representatives are agitating for a strike we find that at a meeting of delegates from the lodges connected with the South Yorkshire and North Derbyshire Miners' Association a resolution was passed declaring "that the representatives support no policy which is calculated to lead the district into a strike." It is, therefore, evident that in our portion of the West Riding at least the miners will not strike, and the example thus set, we feel sure, will be followed out in the others. Should, however, some of the pits stand it will be so much the better for the men at the others. In some of the Lancashire districts the men are evidently ready for a strike, and at a meeting of delegates, held at Wigan on Wednesday, it was resolved to give the employers 14 days' notice for an advance of 15 per cent. on the wages at present paid, and a similar resolution was adopted at Bolton. At the meeting held in connection with the latter district the resolution was to the effect that an advance of wages should be demanded by Oct. 1, and in the event of a refusal that there should be a strike of all miners throughout the kingdom. Bolton speaks for the whole of the kingdom, so that we have another illustration of the "Tooley-street" trio; but these were modest in comparison with the Bolton miners, for they only spoke as the representatives of the men of England, whilst the Lancashire delegates "go in" on behalf of the United Kingdom, although they form but a contemptible minority of the miners even in their own country.

In Wigan, it appears, the secretary of the miners felt the pulse of some other associations, amongst them that of the South Yorkshire and North Derbyshire, and at the meeting of the delegates of the latter, the secretary was requested to send a copy of the resolution come to, not to do anything that could lead to a strike, to Mr. Finney, of Wigan. In South Derbyshire there are no signs of uneasiness, and as a large number of the men during the summer had a very hard time of it they are not now likely to abandon their present position, which is so much better, many of them being on full time. It will, therefore, be evident that the prospect of a general strike has come to an untimely end by the action of some of the most important of the Miners' Associations, and that whatever course may be taken by a remnant of the mining body contrary to the views of Northumberland and others, it will be of short duration, and will do more injury to the men themselves who adopt it than to any others. It will also show that prudent counsels have now more weight with the majority of our miners than that of those who would foment dissension between masters and workmen for the purpose of abtaining concessions by force, which the state of trade will not dmit of.

THE IRON TRADE.

The following statistics have been issued by the British Iron Trade Association:—

Production of pig-iron for the half-year ending June 30, 1882, and of the stocks in warrant stores and in makers' hands in each district of the United Kingdom at that date:—

PRODUCTION OF PIG-IRON.

	Half-year ending June 30, 1882.	Half-year ending Dec. 31, 1881.
Cleveland .....Tons	1,332,543	..Tons 1,310,490
Scotland (estimated)...	556,600	604,578
West Cumberland	472,038	545,770
South Wales	476,536	425,476
North Wales	25,672	17,063
South Staffordshire ...	190,442	225,586
North Staffordshire ...	157,386	151,761
Lincolnshire	102,861	77,837
Lancashire	392,668	359,096
Northamptonshire ...	90,475	105,776
West & So. Yorkshire..	151,096	176,171
Derbyshire and Notts..	228,653	179,755
Shropshire	39,275	37,835
Gloucestershire, Wiltshire, &c.....	25,000	32,000
Totals	4,241,245	4,249,194

Stocks of pig-iron held by makers and in warrant stores on June 30, 1882, with corresponding returns for Dec. 31, 1881:—

	Stock at June 30, 1882.	Stock at Dec. 31, 1881.
Cleveland .....Tons	338,571	.....Tons 378,170
Scotland	636,537*	940,000
West Cumberland	56,453	68,051
South Wales	57,821	53,238
North Wales	2,437	10,740
South Staffordshire ...	40,573	46,500
North Staffordshire ...	42,851	28,707
Lincolnshire	15,803	23,844
Lancashire	90,671	57,836
Northamptonshire.....	15,486	14,915
West & So. Yorkshire..	29,635	49,070
Derbyshire and Notts..	20,681	26,686
Shropshire	18,930	34,005
Gloucestershire, Wiltshire, &c.....	5,320	4,500
Totals	1,371,789	1,736,262

* Stocks in warrant stores only, no returns having been received from makers.

	Tons.
The stock of pig-iron on Dec. 31, 1881, was.....	1,736,262
Production of pig-iron during first half of 1882...	4,241,245
Total	5,977,507
Deduct stock,† June 30, 1882	1,638,115
Total consumption of pig-iron to June 30, 1882...	4,339,392
Being at the rate per annum of.....	8,678,784
As against an actual consumption in 1881 of	8,182,513
Showing a decrease at the rate per annum of.....	496,271

† Makers' stocks in Scotland estimated at same figure as that ascertained for January 1, 1882.

COAL IN SOUTH AFRICA.

Coal deposits have been known to exist for some years in an extensive range of mountains which skirt the north part of King William's Town, South Africa, and in the neighbourhood itself the coal has been extensively used by the farmers for domestic purposes It is only recently, however, that more sustained and careful attention has been given to the subject. The Colonial Government has now appointed some geological experts to investigate and report upon the question, and if the reports of these gentlemen prove reliable it may be considered as an established fact that the Stormberg range of mountains contains a practically indefinite quantity of this precious deposit. One of the investigating geologists reports that the Cape Colony is now in possession of the coal by which it can be made a mining, manufacturing, industrial, and self-supporting country; and that so far as regards mineral required for her own consumption it can hold itself independent of England. This latter sentence certainly appears a little ungracious, but Englishmen will probably be prepared to overlook this if good workable coal can be found in South Africa, as it cannot fail to promote the material interests of that steadily advancing group of colonies. It is, of course, one thing for coal to exist in South Africa and quite another thing to turn it to profitable account as to secure this latter object efficient means of transport must be provided, labour and capital must be brought into vigorous and combined operation, and it is not very easy to realise all these things at once in young settlements. However, be this as it may, the establishment has been proposed of the Great Stormberg Mining Company (Limited), with a capital of 60,000 shares of 1*l.* each. The company proposes to work what is known as the Molteno Mine, situated about 50 or 60 miles north-west of Queenstown, the present terminus of the Eastern Border Railway. Current reports represent the Molteno seam as extending over an area of 200 acres, and the following report is given of the seam by the Government expert:—"First, sandstone roof; secondly, coal 6 in.; thirdly, gray shale 5 in.; fourthly, coal 10 in.; fifthly, black shale 9 in.; sixthly, coal (bottom) 14 in.; seventhly, shaley sandstone.

We shall watch the future course of this South African coal question with considerable interest. Hitherto the South African colonies have scarcely made the progress which they might have been expected to exhibit. This has been attributable to the disturbing influence of more or less hostile native races, and the fact that the white population is not altogether of one stock. The competition of the United States and Australia as immigration fields has also, no doubt, exercised a depressing influence upon the South African settlements; but, in spite of all obstacles, they have been steadily advancing in population and importance during the last ten years. There is one circumstance which tells powerfully in favour of South Africa as an immigration field, and that is the fact that it is within three weeks' steaming of the mother country. This places South Africa at a great advantage as compared with Australia, although three weeks is longer by a good seven days than the time occupied by a voyage from Western Europe to the United States. Now that a certain amount of population is accumulating in British South Africa, and now that the existing means of communication between that quarter of the world and Great Britain have been improved and accelerated, it appears to us that increased attention is likely to be devoted to South African resources both by the capitalists and working classes of this country. The Cape Government has shown an intelligent appreciation of the value of railways as a means of opening up the extensive territories under its control, and while railways will facilitate the distribution of any coal which may be raised from the South African soil their working will also be cheapened and facilitated. While it is probably premature to assert that the utilisation of South African coal will render South Africa independent of England, there can be little doubt that such a utilisation will exert a highly beneficial influence upon industrial operations of every description in the Cape Colony, Natal, and the neighbouring communities more or less under their rule. When we are dealing with South African affairs it is impossible to altogether overlook the element of South African politics. Too many wars have in our judgment been waged by the white settlers with the Kaffirs, the Zulus, the Basutos, and other native races. If South Africa is ever to be really prosperous it appears to us that the colonists must endeavour to secure to a greater extent than they have hitherto done the harmonious co-operation and the goodwill of the native races. We will not go the length of affirming that an appeal to arms ought never to be made in a group of young

colonies, but it would certainly be far better to attach native races to our rule by acts of justice and kindness rather than to coerce them by fire and sword.

THE GUAYANA GOLD FIELDS.

The recent advices from the gold fields of Venezuelan Guayana are very satisfactory. The return of gold from the Callao Mine from July 21 to Aug. 20, one month, was about 12,000 ozs., from the Chile Mine 2011 ozs., and from the Potosi Mine 1125 ozs. The result of the crushing from the Cicapra Mine has not yet come to hand. Several well known English and French mining engineers are now in the country making the necessary arrangements for placing the Panama, Nacupai, and other valuable properties into full operation, and doubtless the reports from Guayana will at an early date attract a considerable amount of public attention. Meanwhile the preliminary surveys of the important railway from the port of Saravia on the Orinoco into the heart of the gold districts have been completed, and a large number of additional engineers, under the direction of Messrs. J. G. Liddiard and W. C. Punchard will leave Southampton for Guayana by the Royal Mail steamer on Monday next to augment the important engineering staff, under the direction of Mr. A. S. Truman, A.M.I.C.E., the Guayana Company's resident engineer-in-chief. The construction of this railway will give a great impetus to the mining industry of these rich gold fields. A large number of claims have been taken up, probably between 400 and 500, and the owners are only awaiting a better means of communication and transport, and the importation of labour to set their mines into full operation. The Guayana Company (Limited) are also arranging for the introduction of a large amount of foreign labour, which will be utilised in the first instance principally for the construction of the railway and afterwards for opening up the mines. Their chief labour and emigration agent, Mr. M. B. Rochefort, a gentleman who has had 18 years' experience in the principal labour districts of India and China, also proceeds to Guayana on Monday next to inaugurate the arrangements relating to this important matter.

THE ROYAL CORNWALL POLYTECHNIC JUBILEE.

The Jubilee meeting of the Royal Cornwall Polytechnic Society, the report of which was commenced in last week's *Mining Journal*, has been of more than usual interest, as showing not only a satisfactory amount of vitality, but that the growth of fifty years has been such as to justify its claim to permanent prosperity and utility. This prosperity, moreover, has been imparted to younger associations — the Miners' Association of Cornwall and Devon, and the Mining Institute of Cornwall — which may be regarded as offshoots from it, inasmuch as many of the same men have been the moving spirits in all; and in connection with the present meeting a Mining Conference was held, at which much valuable information of a thoroughly practical character was elicited. The chair was occupied by Mr. PETER WATSON who, in the course of an address which occupied an hour and a half in delivery, offered many suggestions and observations which cannot receive too careful attention. After noting the competition which our home miners have now to meet, he remarked that the rule of thumb system of management which answered well enough half a century ago has now become obsolete, and must give place to a directing power and skill which call to their aid such modern appliances as the rock-drill, plunger-jiggers, self acting machines—frames, buddles, trunks—all well arranged to take the orestuff direct from the crusher or stamps, and capable of doing the work required of them at the cheapest possible rate per ton of ore, and so as to make the "waste" too poor to be treated.

The large assembly who listened so attentively to the address can leave no doubt as to the interest taken in the subject, and Mr. Peter Watson did not fail to impress them with the importance of the improvements which have already been introduced, and the necessity to be ever on the alert in order to keep in the van of the metal producers of the world. He referred to the machinery and appliances now seen at the mines, and compared it with that employed when the Royal Cornwall Polytechnic Society had its birth, and as a further evidence of the great progress of mining industry at home and abroad he handed round the first three volumes of the *Mining Journal*—those for 1835, 1836, and 1837—bound together in one volume, and then the volume for 1881, remarking that although for one year only it was thrice the size of the earlier volumes for three years together. The thanks which he received for the address, the exhibit, and his conduct in the chair were most enthusiastic, which must have been particularly gratifying to him, considering that it was one of the largest and most important mining meetings ever held in the county. His remarks on the past, present, and future of mining showed clearly that with the great improvements in rock-boring machinery—which it is but just to say Mr. Peter Watson has from the first and continually recommended—and the improved mode of dressing, &c., there is, with anything like moderate prices for metals, a great if not a brilliant future for home tin, copper, and lead mines. The preparation of the address must have involved a large amount of labour, but the author of it had at least some reward in the hearty recognition by such an assembly that "few, if any, have the true interests of mining at heart more than Mr. Peter Watson, who may, moreover, be congratulated that during his 38 years' experience in connection with mining and smelting he has been associated, frequently in a managerial capacity, with some of the leading and most profitable undertakings in the country."

THE DIAMOND FIELDS.—At Kimberley the authorities are taking stringent measures to put down the illicit diamond buying so prevalent there. An offender has been sentenced to a fine of 500*l.* and five years' imprisonment for the offence. Trade is stagnant, and insolvencies are frequent. At the first meeting of the creditors of a firm of merchants lately declared bankrupt debts to the amount of 117,312*l.* were proved.

GOLD AND SILVER MINES.—Mr. G. Phillips Bevan delivered a lecture at the meeting of the Balloon Society, on the gold and silver mines of the world. Mr. Le Fevre, President of the society, in introducing Mr. Alsager Hill, who presided, said the question had been asked why the society had not taken part in the military balloon operations connected with the war now proceeding in Egypt. The answer was that the society had been established solely for scientific purposes, and had nothing whatever to do with military operations. Mr. Bevan gave an interesting account of gold and silver mines, and of mining. He remarked that the prospects of gold mining in India, about which there was so great a *furore* a year ago, had turned out as he had predicted they would. The mines were not nearly so profitable as the promoters of companies had appeared to think they would prove to be. The conclusion which he drew from observation was that at the present time silver mining was by far the more profitable of the two industries. Goid-bearing quartz was found in the British Islands, particularly in the neighbourhood of Dolgelly in Merionethshire, where he felt sure that a profitable yield would follow the construction of proper machinery for mining purposes. In the course of a short discussion, Mr. Dean, a gentleman who has had experience in Australian gold mining, expressed his opinion that gold mining in Wales could not be made to pay, owing to the enormous cost of winning the precious metal. Some other gentlemen of experience continued the discussion briefly, and a vote of thanks was accorded to Mr. Bevan for his paper.

VISIT OF THE IRON AND STEEL INSTITUTE TO AUSTRIA.—Great preparations have been made for the reception of the members of the Iron and Steel Institute at Vienna, their place of meeting this year. The committee consists of over 200 of the highest personages in Austria, including men known in the world of science, of finance, and of general industry, besides Cabinet Ministers, Governors, and the Burgomasters of Vienna, Pesth, and other important cities, and almost all the Under-Secretaries of State, Austrian and Hungarian, the directors of the leading railway companies, all the most celebrated architects, and representatives of the highest nobility. The visitors will proceed to inspect the Styrian and Hungarian iron-works, and upon other excursions, and the newspapers are urging the people to give these typical Englishmen a splendid reception.

REPORT FROM CORNWALL.

Sept. 14.—There now seems to be every sign of a steady, though not rapid progress in mining matters, and within the next month we look to see a fair advance in the price of metals, especially of tin, and quite as great, if not a greater advance in shares. To this end the excellent weather we are now enjoying and the improved harvest prospects will in no small degree conduce.

It has been very gratifying to see the thorough *rapprochement* between the practical societies of the county on the occasion of the Polytechnic Jubilee. When we were penning our report on Thursday last the chief members of each were assembled in Falmouth making common cause under the triple presidency of the Rev. Canon Rogers for the Polytechnic, Mr. R. Taylor for the Miners' Association, and Mr. W. Husband for the Mining Institute. This is as it should be, and the cordial sympathy and co-operation there shown cannot fail in good results.

One of the most successful engagements in connection with the Polytechnic Jubilee was the Mining Conference on Monday, over which Mr. Peter Watson presided with such ability and tact, and at which such excellent papers were read, and such practical discussion took place. This is an innovation which may well be repeated, and its success should make the Polytechnic authorities seriously consider whether such a conference should not in future form an essential part of the arrangements for their meeting. The main points will be found referred to elsewhere. Mr. Peter Watson's address was every way worthy of the occasion, and as a "record of progress" carrying out the central idea of the Jubilee nothing could have been a more marked and gratifying success. The Polytechnic Jubilee must mark an era in the practical history of the county.

The impossibility of dealing with them at the moment in the way their importance deserved led us last week to postpone reference to the highly important series of statistics laid by Mr. Richard Taylor before the meeting of the Miners' Association, over which he presided. They were drawn from the mining experience, not of England only, but of the Continent and of America, and thus covered the widest possible field. For some of the conclusions we have been to a certain extent prepared by the reports of our own inspectors of metalliferous mines, who have shown that it is not the disasters —the explosions—that are the chief cause of the fatality of mining, but the perpetually recurring little accidents, which by their very frequency overbalance the destruction caused by the great calamities. It is true that on the Continent where mines have long been under very strict supervision, in Prussia more especially, to which the figures here cited more clearly apply, the deaths by casualties in coal mines are more than double those in the metalliferous, say an average over the 10 years—1871-1880—of 3 per 1000 in the former case, and of 1·5 per 1000 in the latter; but until the Metalliferous Mines Acts came into existence it was not so in England, and there were even years in which the proportion was decidedly reversed. Now, however, an improvement is plainly manifest, but still while the ratio of deaths per 1000 in English coal mines in the same 10 years was 2·353, while in the metalliferous mines over the period covered by the reports—1874-1880—it was just 1·650.

One very remarkable point elicited from the statistics of all mining countries is the comparatively unimportant part taken over long periods that explosives play. Whether in coal or metalliferous mines alike it is the universal experience that falls of ground are the most prolific causes of accidental deaths. In the Prussian mines of all classes on the average of the decade quoted falls of ground caused no less than 0·975 deaths per 1000 out of a total of 2·565, and next to them in fatality came casualties in shafts. Taking the coal mines only, while falls of ground accounted for a proportion of 1·204, explosions only reached 0·576. And so in England, out of a total death rate per 1000 in the decade of 2·353 in the coal mines, falls of ground caused a proportion of 0·933, while explosions only reached 0·557. As to metalliferous mines, of an average of 89·1, fatal accidents in the period under review, 32 were caused by falls of ground, and next to them came disasters in shafts.

Now, a careful examination of the statistics show that there is greater liability to accidents in shafts, grouping all the causes together in England in metalliferous mines than in coal mines, while on the Continent the proportions are reversed. And this brings us to the most remarkable and important conclusions of the whole set of figures—the relative dangers of different modes of ascending and descending. It will surprise every one who has not closely enquired into the matter to learn that of all the methods of ascending and descending mines the old fashioned ladder-way is the safest, that the cage comes next, and that the man engine, so long considered such a vast improvement and such a boon to the working miner, is the most fatal of all. Taking the Prussian average of ten years, with a total of just a million and a-half employed, the fatal accidents caused in the use of ladders reached 0·101 per 1000, while cages figured for 0·115, and man engines reached 0·570, more than five times as many. Of course against the use of ladders, and in favour of man engines, but still more of cages, must be set the fact that in very deep mines some means of mechanical ascent and descent is inevitable, and that the slight extra peril—say, of the cages—is far more than counterbalanced by the gain to health in the avoidance of the toilsome ladder work. Nay, we would not say that the average duration of life, even with the man engine, is not more, in spite of the greater liability to accident, than with ladders. Still as ladders have only a practical range in the present day the lesson is clear—cages must be introduced wherever possible.

And here we see the advantage likely to accrue from the step taken by Capt. White at West Feevor, where the colliery cage system is at work in a form thoroughly adapted to the requirements of tin mining. There are very many ways in which mining districts may learn from each other, and this is one of them. Meanwhile, we hope the valuable statistics of Mr. Taylor will receive the attention their high practical importance deserves.

The drill competition at the Polytechnic is referred to elsewhere, and will not be finished until next week. Meantime, the judges in the mechanical department have made a couple of additional awards—20s. to Hendra's model of a set of rag frames, and the first bronze medal to Prior's patent piston packing, which was delayed on the railway, and did not, therefore, arrive in time for their first inspection. Mr. Taylor has given further proof this week of the very strong interest that he has taken in the Polytechnic from the first, by giving a holiday to all the hands on the Redruth and Chacewater Railway (over 50), and paying their expenses to the exhibition. Accompanied by their wives and families, they formed a strong and much interested contingent.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 14.—Prices of coal and ironstone are decidedly stronger this week, by reason of the colliers' agitation. For forge and mill coal vendors are asking an advance of between 3d. and 9d. per ton, and at the same time they are very cautious in their acceptance of offers to buy forward. Such offers are this week plentiful. The domestic coalmasters refuse to give in their advance of 1s. per ton declared last week. Calcined ironstone, the product of North Staffordshire, is firmer on the week by from 3d. to 6d. per ton. Pig-iron is stronger, particularly medium qualities made elsewhere and offered on our local exchanges. Northampton pigs, formerly 47s. 6d., are now 50s. in some cases. Staffordshire cinder pigs are 40s. to 42s. 6d., and all-mine pigs 65s. to 67s. 6d. Manufactured iron is firmer all round this week, and makers are refusing to book far forward. Boiler-plates are securing a 5s. per ton rise; so, too, are some thin galvanising sheets, while common bars are worth more money by 2s. 6d., making them 6*l.* 10s. per ton.

The colliers' agitation has this week assumed definite proportions. As to North Staffordshire the coal and ironstone men to the number of 18,000 have, after holding mass meetings, decided to ask for 10 per cent. increase, the advance to be conceded on the first pay-day of the next month. At some collieries the notices have already been handed in. The South Staffordshire men have, at a mass meeting at Dudley, unanimously passed the following resolutions:—"That we endorse the resolutions passed at the Manchester Conference." "That the Chairman of the Coal Trade be asked to call a meeting of the coal trade for the purpose of meeting a deputation of the working men and their representatives to consider the wages question; and that in the event of our not getting an advance a general strike take place."

The directors of the Cannock and Huntington Colliery Company report that by a new arrangement with the noble owner it has been provided that in consideration of the company raising or endeavouring to raise further capital to the extent of 20,000*l.* by Dec. 31 next, Lord Hatherton will accept a surrender of the existing lease of the company to Messrs. North and Son, and will grant a new lease direct to the company. Messrs. North, in their turn will, without any consideration from the company, accept a surrender of the lease granted by them. The directors recommend the raising of the capital by preference shares bearing interest at the rate of 10 per cent. The shafts continue in good condition, and there is nothing to prevent operations being immediately resumed should sufficient funds be available.

TRADE OF THE TYNE AND WEAR

Sept. 13.—There is little change in the position of the coal trade, most of the works on the Tyne and Wear are fairly employed; the demand for steam coal is on the whole rather quiet, and house coal is improving, but as yet there is little advance in price. There is a growing demand for coke both for inland consumption and for shipment. The demand for manufacturing coals for ironworks, &c., continues good. There is an uneasy feeling about the wages question in the coal trade, the miners are far from being satisfied with present rates, but we still hold the opinion that the miners in this district will seriously consider the question before committing themselves to the extreme course which appears likely to be adopted by the men in other parts of closing the works generally. It appears to be more probable that a reduction in the output will be proposed here, and possibly the miners and colliery owners may decide to adopt this course for a time as an experiment. The sliding scales which have been worked for some time here have on the whole worked satisfactorily, but at the same time the men appear to attach less importance to these scales than formerly. There is a growing conviction amongst them that some change should be made if possible in the basis on which these scales have been established, and it is quite possible that a misunderstanding may occur between the masters and men on this score. The demand for fire-bricks, sanitary pipes, and all fire-clay goods in these rivers continues very good. Pipes of all kinds and other goods are exported to the continental countries in large quantities, and this trade has assumed larger proportions than at any former period. Of course the consumption on the spot at ironworks, chemical works, &c., in Cleveland is also very large.

The death of Mr. W. R. Cole, mining engineer, has caused much surprise and regret. He has been manager of several important coal mines in Northumberland for a long period—Bebside, Choppington, Burradon, &c., and he was highly respected by his employers, the miners, and all with whom he came in contact. He was a thoroughly practical and experienced miner; and, like so many Tyne-side men, he was what is termed a self-made man. His father was viewer at the Walker Colliery, and Mr. Cole, who has been called so suddenly away, was brought up in the practical work of the mine from an early age, and he in his leisure hours studied hard and acquired the necessary amount of scientific and general knowledge to enable him to fill the responsible and honourable position which he held. He was well known for his energy and industry throughout the district, and his attainments placed him in the front rank of Northern mining engineers. He was one of the first members of the joint committee of masters and men formed in 1873. He also appeared before a Parliamentary committee some years ago, to give evidence on the mode of coal mining carried out in this district.

The iron trade continues firm. There is a large demand for Cleveland iron, and comparatively small stocks, a reduction of about 125,000 tons having taken place within the last 11 months, so that it really is not necessary at present to restrict the make; but the situation in Scotland is very different, as heavy stocks are held there, and the Scotch trade has considerable influence on the trade here. The decline in Cleveland stocks announced on Monday, as well as the heavy shipments in August and those now going forward, are elements of strength to the trade. During the first three days last week 15,835 tons of pig metal were shipped from Middlesborough. The manufactured iron trade is very steady; the demand has improved for shipbuilding iron, and also for bars. The foundry trade has been rather quiet. Steel rails have been sent away in large quantities, and increased orders are expected from America. Steel rails are only 5*l.* 5s. per ton; ship-plates, 6*l.* 15s.; pig-iron is still quoted 44s. 6d. for No. 3. Messrs. Connal's stocks are now 114,873 tons. There are important questions in connection with the iron trade pending, the masters are demanding a reduction while the men at the same time wish for an advance in the rates. The men claim an advance of 7½ per cent. from Nov. 1 on the lapse of Sir J. W. Pease's award, while the employers claim a reduction, it is said, of 12½ per cent.

The North-East Coast Exhibition has proved to be a decided success; the weather has been brilliant, and the number of visitors, local people, and also visitors from all parts of the county has been very large. The great iron shipbuilders and marine engine builders in the district are well represented, and the Clyde ship and engine builders also have many important exhibits. We append a short notice of the most important of these. Messrs. Hawthorn, Newcastle, engines of H.M. gunboat Dolphin, horizontal compound direct-acting cylinder, 32 in. and 58 in. diameter. The cylinders have working barrels of Whitworth's steel and cast-steel pistons, and the crank shaft and all working gear are of forged steel. The condenser is constructed of brass plate, and contains a cooling surface of 1500 square feet. The engine indicates 750-horse power, running at 120 revolutions per minute; working pressure 90 lbs. Screw propeller and shaft of the same ship: the propeller is of brass, and the shaft is of forged steel. The same firm show models of very fine patent boilers, and also various other engines, &c. They also show photographs and designs of five types of locomotives. The firm has been famed for constructing locomotives from the earliest period of railways, and they have added marine engines of late years.

Messrs. Wigham, Richardson show models of the different types of vessels they have built, and also a small engine, which is a further step in the direction of James Watt's great invention. Watt invented the mode of condensing the steam in a separate chamber, Messrs. Richardson expand the steam in three different cylinders. The present engine is only experimental. A mere list of the models shown by this enterprising company would occupy a large space.

The models exhibited by Charles Mitchell and Co. comprise a great variety of vessels, yachts, merchant vessels, and war vessels. Several vessels built for the Russian Government, from 5000 tons downwards; models of the cable ships Faraday and Hooper, each 6500 tons. They show also a model of the clipper screw-steamers St. Osyth and Hankow, both 4500 tons; the first vessel is well known, and it was the first employed between England and Australia direct, and accomplished the voyage in a little over 40 days. The Wear shipbuilders are also well represented—Messrs. James Laing, Bartram, Haswell and Co., Donford, &c. Palmer's Shipbuilding Company, Jarrow, full models of passenger steamer China, Her Majesty's ship Jumna, Her Majesty's gunboats Dee and Don, &c.

The great shipbuilders on the Clyde are also well represented, and models and drawings of their greatest works, which are legion, are exhibited—Messrs. R. Napier and Sons, Duncan and Co., &c. Messrs. Caird and Co., Greenock, have a very fine collection of models and drawings of vessels of the largest size and most remarkable character. Messrs. Laird, Birkenhead, and some London firms also exhibit. The Barrow Shipbuilding Company: A very large model of the Anchor line steamship City of Rome, for Atlantic service; accommodation for 290 first-class passengers and 1500 emigrants. This is, we believe, the largest vessel of the kind afloat; her length is 600 ft. One of the most attractive features of the Exhibition is the beautiful collection of models of vessels sent by the Lords of the

Admiralty, Whitehall, London. The Master and Brethren of the Trinity House, Newcastle, also have a very fine collection of models.

One of the most important and useful features of the Exhibition is the patent boilers shown under steam. Some of these boilers give very remarkable results both as to the evaporation of water in a given time and the economy effected in the use of fuel. There is no doubt that the results shown by these boilers will lead to their introduction in many cases, as engineers and manufacturers inspect them at work, and witness the experiments made, which are conducted in the most careful manner, and which prove most conclusively the great economy effected by them. The electric light is used for the illumination of the buildings, and also the roads and streets adjacent. There are a great variety of these lights, and as they are pretty certain to come into general use for lighting factories, shops, collieries, &c., above and below ground, the exhibition of these lights is calculated to be of the greatest service at this time. In Section 1 balcony is an exhibit of the Steamship and General Electric Telegraph Company, Dean-street, Newcastle. These electric steamship telegraphs supersede the mechanical arrangements now in use. By its means signals can be conveyed with the utmost precision to and from all the important parts of ships, thus giving efficient control over the working of the ship. It will no doubt prove of the greatest advantage in the working of all kinds of large vessels, including war ships, and it is also equally applicable for signalling in mines and shafts. Valuable testimonials as to its merits have been given by eminent ship captains and also colliery viewers. The contribution of the Maxim-Weston Electric Company deserves notice. The skating rink is lighted by nine Weston arc lamps most brilliantly, while a fine group of the Maxim incandescent lamps light the Armstrong gun. These lamps also light another annexe, and we are informed that the owners of a large coking colliery in South Durham have arranged to apply these lamps for lighting their extensive works above and below ground. The dynamo which works these lamps is driven by a three-cylinder engine by Messrs. Thompson of Seaham.

TRADE IN SOUTH WALES.

Sept. 14.—The steam-coal trade in South Wales maintains its activity, and prices are firm with an upward tendency. The amount shipped during the first eight months of the present year was 4,884,025 tons; Newport, 899,166 tons; Swansea, 721,772 tons; and Llanelly, 53,821 tons. The amounts sent away in the month of August were—Cardiff, 485,276 tons; Newport, 119,411 tons; Swansea, 721,772 tons; Llanelly, 6079 tons. The quantity shipped last week was—Cardiff, 130,768 tons foreign and 9512 coastwise; Newport, 26,907 tons foreign and 18,116 coastwise; Swansea, 15,636 tons foreign and 9512 coastwise. The prices range from 8s. 6d. for Birchgrove to 11s. for Nixon's Navigation.

We have to record a still further success at the new pit on the Coegant Estate, Mr. Hyde, of Tywith House, the contractor, having last week struck the 7 ft. seam of coal. The pit has already been sunk 150 yards, and the seams discovered in the descent are the following:—The 4-ft., the 6-ft., the 9-ft., and last week the 7-ft. seam. In about 12 yards descent it is expected that the lower 4-ft. seam will be struck. The ground near the 7-ft. seam is a little disturbed, and the seam shows signs of tilting, but the coal is of excellent quality. A splendid new engine-house has been erected, and men are engaged in removing the large and powerful engine at the Dyffryn Pit, which is now abandoned, to the new pit.

The shipments of iron and steel for the past eight months of the present year were—Newport, 122,691 tons; Cardiff, 87,724 tons; Swansea, 5305 tons. The amount sent away during the month of August was—Newport, 13,882 tons; Cardiff, 10,691 tons; Swansea, 129 tons. Last week there were shipped from Newport, 9089 tons to Corpus Christe, Lisbon, Dieppe, and Passages; Cardiff, 1011 tons. Iron ore is coming in at Newport in immense quantities, 19,914 tons having been received from Bilbao, and 3440 from other sources; Cardiff, 5628 tons from Bilbao, and 4592 from other sources The price may be quoted at 15s. to 15s. 3d., with a weaker tendency.

The strike at the Landore Works continues. The company are advertising for men to work the furnaces. Some discussion has arisen with regard to the wages for the hammermen, who aver that they receive only 3*l.* 10s. per week, while the company gave it as from 5*l.* 10s. to 6*l.* An inspection of the books prove that for five days a week four hammermen earned respectively 4*l.* 10s., 3*l.* 16s. 11d., 4*l.* 4s., and 4*l.* 9s. In another case, for four and a quarter days, the wages paid were respectively 4*l.* 10s. 9d., 4*l.* 9s. 9d., and 3*l.* 14s. 5d., and in one case 4*l.* 0s. 2d. was earned in three days. The wages of the helpers of the hammermen in the New Works average 2*l.* 10s. In most cases the men do not make full time, for reasons of their own, or they might earn considerably more.

The tin-plate trade is healthier than it has been for some years, and good coke-mades fetch from 16s. 3d. to 16s. 9d. per box at Liverpool. All the works now open seem to be fairly employed. At Pontymister two new mills are erected in the forge. Abercarn is reported as doing an enormous amount of work. These works are owned and managed by Mr. Daniel Whitehouse, who managed the Cwmavon Sheet Mills 30 years ago. Abertillery is said to be going very steadily. These works have been greatly enlarged in the last few years.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Sept. 14.—It is a singular fact that in nearly all disputes in connection with mines it is those who make the most wages are what may be called the disturbers of the peace. Lead miners do not realise much more money than ordinary labourers, but those engaged in collieries, who work much less time daily in the best and busiest of times, are constantly crying out for more money, and are in frequent antagonism with their employers. This is due in a great measure to the employment of men who are well paid for looking after the hard workers, and who have to show something for the money they receive. They do this by constant agitation, and airing what they call grievances their *clientele* are said to labour under. We have a strong proof of this just now in the endeavour being made to get the men to strike for an advance of wages, although the leaders well know that in the present state of the coal trade mineowners are keeping their places going without any profit to themselves, satisfied if they can find employment for the workpeople. Just now the coal trade is tolerably good, but the prices realised are still far below what they should be to give even a small percentage on the capital invested. Under such circumstances we need scarcely say that an advance in wages is out of the question. It is gratifying, however, to state that the coal miners of Derbyshire so far have shown no disposition to attempt to force their employers to make concessions that the price at which they are obliged to sell their coal will not admit of. The men, however, are now working better than they have done for some time, although their wages are certainly lower than could be desired. But full time, after all, is something worth having after a season of comparative dulness.

House coal has been going off tolerable well from several of the largest collieries in the Chesterfield district, although not quite so much has been sent of late from Clay Cross to London; but something like an average has been sent from Grassmoor; Langley Mill, Eckington, Blackwell, and Pilsley, whilst an indicated tonnage has been sent from Staveley and some other places. Steam coal has been in tolerably fair request, but it is principally in demand for local ironworks and the railway companies, but the contract prices entered into a few months ago are not such as to leave any great margin of profit. In other descriptions of fuel there has not been much change, either as regards the demand or price. In iron there is still a large production, as there has been for several months past, but whether such will continue to be the case now that the agreement between the Scotch and Cleveland pig makers has terminated, remains to be seen. At Dronfield the steelworks are as busy as ever, and it is now stated that every effort will be made to clear off orders by the end of the year, when the establishment will pass into the hands of Cammell and Co., of the Cyclops Works, Sheffield, who will remove them into Cumberland.

In Sheffield some branches have become busier than they were, so that trade will be really good up to the end of the year in almost every department. There has been a good run for various brands of steel for the present to America as well as to the Continent, whilst there has also been a large make of Bessemer for the local works. In steel rails a steady business is being done, but the prices are such as to leave but little profit, seeing that the works near to shipping ports have a great advantage over those in inland places. The mills are doing well, more especially in plates of almost every description, including those for armour-clads, for which there are heavy orders in hand that will take some time clearing off. More is also being done in ship-plates, notwithstanding the activity at the new works in the North of England that are situate close to shipbuilding yards. In general cutlery a fair amount of business is being done, both for the home markets and for exportation; and makers of edge tools, saws, and files are also doing well. The season for light agricultural implements for home consumption is now over, but makers are favourably off for trade for the colonies as well as for other countries. At the foundries there is more doing than in the earlier part of the year, especially in machinery, whilst the engine-works continue to be well employed. In the neighbourhood of Sheffield best made pig is being turned out, so that large quantities have to be imported, more particularly of hematites for the makers of crucible and Bessemer steel.

In South Yorkshire the coal trade is tolerably good all round, but there has been more agitation of late with respect to an advance of wages. But it has been pointed out that the representatives of the men might do good service, instead of attempting the impossible, were they to endeavour to bring down the carriage rate for coal going by railway, more especially to London and the South, so as to more closely assimulate the charge with that which is made by sea from the Tyne and Wear. As it is the charge for coal from the Tyne or Wear to London is 4s. per ton, whilst from South Yorkshire to the Metropolis by railway it is 3s. 2d. per ton, and from Derbyshire and Notts 5s. 10d. per ton. In fact, coal is now taken from Newcastle to Cronstadt at 5s. 9d. per ton, 1s. less than from Derbyshire, and 1s. 5d. per ton less than from South Yorkshire to London. The directors of the railway companies having been appealed to state that the rate is as low as it can be, and only leaves a moderate profit. But this does not bear out the evidence of several railway specialists, for Mr. J. Allport, the late manager of the Midland Company, stated before a Parliamentary committee that "the cost of working the coal traffic is ·20d. to ·24d. (under a farthing) per ton per mile." Colonel Smith, the Chairman of the Hull and Barnsley line, now in course of construction, stated in the committee-room of the House of Commons that his company would only receive 0·89 of a farthing per ton per mile gross receipts for their share of the conveyance of coal from South Yorkshire to Hull. Seeing that the rate by the Midland is 44d. per ton per mile to London, from the West Riding 48d., and from South Yorkshire ·50d. per ton, it is evident that the railway companies derive a large profit from the coal traffic to London, as well as to other places. But reverting to the quantity of coal consumed in the Metropolis, it appears not to have progressed in the same ratio as the population, which the Royal Commission stated there was every reason to believe would be the case. But quite the contrary has been the result of the present year's traffic so far. In fact, during the last eight months there has been a falling off, compared with the corresponding period of last year, of about 100,000 tons.

TECHNICAL EDUCATION IN THE UNITED STATES.

The Annual Report of the President of Columbia College, New York, always contains a large amount of valuable information, and not unfrequently many important suggestions, that for the present year just issued—London: Trübner and Co., Ludgate Hill—forming no exception to the rule for the venerable President—Dr. F. A. P. Barnard—has again given many interesting facts, and offered some suggestions the adoption of which cannot fail to be advantageous to the College and intending students. Both the College and the School of Mines maintain the prosperity they have so long enjoyed. The total number of students matriculated during the year was 298, and 14 ceased to be members, of whom two were dropped for irregularity and one was expelled. The total attendance in the School of Mines during the year was 272, and after withdrawal of the graduating class there will remain 209 against 183 at the close of the year preceding; it thus appears that the temporary diminution of numbers occasioned by the exclusion of special students by resolution of the trustees adopted two years ago is being rapidly made good by an increase in the number of regulars. The Schools of Law, Political Science, and Medicine have made equally good progress. With regard to elective studies of seniors geology appears to have been chosen by the largest number of students—astronomy, chemistry, philosophy, and political economy following in the order named. Logic, history, and English literature are obligatory upon all.

In referring to Columbia College as a university, the President remarks that within the last 25 years the college has very greatly enlarged the scope of its teaching and the sphere of its usefulness. In addition to the School of Arts there are in existence associated with it four flourishing professional schools and a graduate department for high culture, the total attendance in all departments amounting to no less than 1600 with about 80 instructors of various grades, and between 20 and 30 other employees. The college has thus taken on functions, and assumed the aspect of an university. In pointing out the difference between colleges and universities, when the terms are properly used, Dr. Barnard remarks that, as in bestowing charters on colleges, American legislatures have invariably accompanied the concession with the power "to give and grant any such degree or degrees to the students of said college, or to any other person or persons by them thought worthy thereof as are usually granted by universities or colleges now existing," all the (more than 400) chartered colleges of the United States—many of them differing only in name from schools for children of tender years, are equally clothed with university powers and entitled to assume the honourable title of university; but, as he adds, universities properly so-called are not merely schools of the professions, but they are at the same time the fountains and fosterers of the highest learning and of the profoundest science of every kind. The so-called technical professions, equally intellectual—that is, requiring equal general culture—are denied the cognomen of "liberal," banished with scorn from the university, and compelled to seek refuge in separate technical schools. Thus, thought and action, the ideal and the practical—a twain that should be joined in indissoluble marriage—are forced into unnatural divorce to the loss and injury of both.

Among the colleges which have made the largest steps in advance in the direction of the higher development of the technical professions are Harvard, Yale, the College of New Jersey, and Columbia College. The Columbia College Schools of Law was opened just 24 years ago; two years later the College of Physicians and Surgeons became associated with it as its School of Medicine; in 1864 was established the School of Mines with the intention originally to confine its teaching to the object indicated by its name, that is to the preparation of well-educated mining engineers; but four years later this design was enlarged by the institution of courses of instruction leading up to five different scientific professions—Mining Engineering, Civil Engineering, Metallurgy, Analytical and Applied Chemistry, and Geology and Palaeontology. To these, in 1881, was added a course in Architecture. And it is gratifying to find that whilst the institution has become indeed an university this has not in any manner impaired its usefulness or diminished its attractiveness as a school for undergraduate instruction. Columbia College has a valuable library of nearly 50,000 volumes, including the library of Mr. S. Whitney Phœnix—a very choice collection of about 7000 volumes in beautiful condition embracing many very valuable and some very rare works—received by bequest during the past year. But it is not in book knowledge alone that the mining student is pushed forward at Columbia College, for from the reports of the several professors and instructors given in the appendix it is seen that real practical work in the mines is performed during the summer vacation. Adjunct Prof. H. S. Munroe reports that this year they have been at work among the copper mines of the Keweenaw, Pennisula, and in the Marquette Iron Region of Northern Michigan, and in submitting this report Prof. Trowbridge remarks that Lake Superior furnishes the best field for the study of practical mining by their students on account of the excellence and variety of the machinery appliances and the extent and character of the mines; and adds that it is proposed, with the President's approval to take the students to the Anthracite Regions of Pennsylvania next summer, and also on the way, either going and returning, to the Iron Mines of New Jersey. It is evident from this brief sketch that Columbia College uses her great resourses for imparting technical instruction to the best possible advantage, and it is not surprising that the result has been to secure for her graduates an amount of confidence and honour as technical professionals and scientists which cannot be claimed by those of any other University in the United States.

Meetings of Public Companies.

THE WASSAU (GOLD COAST) MINING COMPANY.

An extraordinary general meeting of shareholders was held at the New Exchange Buildings, George-yard, Lombard-street, on Thursday—Mr. C. E. Lewis, M.P., in the chair—for the purpose of altering certain of the Articles of Association.

Mr. Fras. S. Symons (the secretary) read the notice calling the meeting.

The Chairman said the object of this meeting, which could not be exceeded, was to take into consideration certain resolutions to alter the Articles of Association, and it was not in the power either of the directors or shareholders to submit any other resolutions; at the same time, seeing the large number of shareholders present, the directors would be happy to afford every information regarding the position and prospects of the company. The certificate of registration of the company was issued on Jan. 21, 1882, and the statutory meeting (which must be held within four months of the registration of the company) took place on May 18, which was really before the issue of the prospectus, and when the company was composed of very few people The whole of the share capital was *bona fide* issued, the number of shareholders was about 300, and all the calls had been paid up to the present time, with the exception of about 300*l.* due from six or eight persons in small amounts. Therefore the capital account might be considered satisfactory. The property of the company was taken over from the vendors on July 1. A settlement for the property was not actually made then, but it had been since completed, and the purchase-money paid, and it was of great importance and a great satisfaction to the directors to know that there was no debt, either direct or indirect, upon the property. (Hear, hear.) The shareholders might say that this was all very well, but they would want to know whether they had a property or whether it was a mere idea and fiction. He did not profess to be an authority on gold mining, but it was not a very abtruse matter. Had they a property? Upon that point they must bear in mind that this was not an idea taken up by a number of speculators, but the company became possessed of this mine from gentlemen of the highest commercial standing, who commenced working it themselves. Therefore, the property was an actual fact, and those gentlemen had sold it to this company. Those gentlemen had not parted with their interest in the company, but still held largely. The property consisted practically of two mines, one called the Crockerville and the other the Argabippo. The Crockerville had had more done to it and more machinery fixed upon it than the other in order to work out and crush the ore; but, on the other hand, the Adjahbippo possessed features which held out prospects of a more immediate yield of ore, but there was no machinery on the mine. The duty of the directors was to develope those mines, and Mr. Crocker, who had been there, had clear ideas as to what should be spent on machinery on both mines, in order to make them complete. A few weeks ago the directors received from Adjahbippo 154 ozs. of amalgam, produced from 25 tons of stone, and the 154 ozs. of amalgam yielded 43·63 ozs. of fine gold, equal to 46·597 ozs. of standard gold, which was sold at 77s. 9d. per oz., and produced 181*l.* There were also 5 tons of sand remaining from the same 25 tons of stone; and the assay from the sand enabled the directors to estimate the present yield at Argabippo Mine at 2 72·100 ozs. per ton of stone. If such were the case the company had pretty good prospects before them, and it would be the duty of the directors to develope the mine, for which purpose they had taken steps to send out the necessary machinery, which the capital was more than ample to provide. It would take eight or nine months to get the materials out there; but in the meantime they would be able to make use of the appliances and labour already on the mine in producing returns from time to time. Although those returns must be small till the additional machinery was got into proper working order, they would want no further call of capital this year, as the amount received from the 15s. call would pay all the purchase-money, and provide the funds necessary to put up the machinery for the working of the mine. There were three or four conditions necessary for the practical success of mining. The first thing was to ascertain that the ore was there; in the next place, that it could be worked and obtained at no immediate expense; in the third place, that there were sufficient facilities for transport to the coast and England to make it pay; and the last was that there should be a market for fine gold in this country. They would be able to judge whether or not every one of these conditions were present. The company had the control and possession of the stations between the mines and the coast, which was 75 miles by water and 30 miles by land carriage. There was no railway at present, and he did not think they would have it soon, but labour was plentiful, and if the gold was there there would be no difficulty in transporting it to the coast. These were facts which could be verified by gentlemen whose testimony was undoubted. Referring to the alterations proposed to be made in the Articles of Association, he said that those alterations were made at the desire of the Stock Exchange; the company asked for a settlement, and the Stock Exchange desired that those alterations shou'd be made, and the directors had no objection whatever in making them. He moved the first resolution:—"No. 1.—That it is expedient to rescind the whole of Article 5 of the Articles of Association of the company, and that the same be, and is, hereby rescinded, and that there be substituted in lieu thereof the following article:—'5. The directors shall not invest any of the moneys of the company in the shares of the company.'"—Mr. Silverlock (a director) seconded the motion, which was carried.

The Chairman moved the second resolution, as follows:—"No. 2.—That it is expedient that the form of transfer of shares in the company, set forth in Article 23 of the Articles of Association of the company, be annulled, and that the same be hereby annulled, and that the following form of transfer be used in lieu thereof:—

"'I in consideration of the sum of paid by hereinafter called the said transferee, do hereby bargain, sell, assign, and transfer to the said transferee, , of and in the undertaking called the Wassau (Gold Coast) Mining Company (Limited), to hold unto the said transferee executors, administrators, and assigns, subject to the several conditions on which I hold the same immediately before the execution hereof. And the said transferee do hereby agree to accept and take the said subject to the conditions aforesaid. As witness our hands and seals this day of in the year of our Lord, one thousand eight hundred and eighty .'"

Mr. Silverlock also seconded the motion, which was put and carried.

The Chairman moved the 3rd resolution as follows: "No. 3. That it is expedient to rescind the whole of Article 74 of the Articles of Association of the company, and that the same be, and is, hereby rescinded, and that there be substituted in lieu thereof the following Article, viz.:—'74. At the ordinary general meeting in the year 1883, and at the ordinary general meeting of every subsequent year, one of the directors shall retire from office by rotation.'"

The motion was seconded by Mr. Silverlock, and carried.

Mr. Crocker, in reply to questions by Mr. A. Turner, and one or two other shareholders, said there would be no difficulty in procuring labour. They had always had more men than they wanted, and they were paid 36s. per month and found their own food. He had not used any imported labour, but simply men from the coast town and the neighbouring coast villages. There were four shafts on the Adjahbippo Mine, and they were putting in an adit. They had gone down 60 ft. with the shafts, all on the lodes. They struck the lode in some places at from 4 to 6 ft. from the surface. There was no difficulty with the water, as the only water which got into the shafts was that which percolated through the soil, and this would run off when the adit was got through. When the adit was in and they begun to open out and stope, the output would increase rapidly.

On the motion of Mr. Best a vote of thanks was passed to the Chairman, and the meeting broke up.

West Lancashire Railway.—The public opening of this line took place yesterday (Friday) in splendid weather. About 500 guests had been invited for the proceedings, which included a procession of carriages along the promenade of Southport, round the town, a run to Preston over the Company's line, and a luncheon in the large hall of the Winter Gardens. The line runs through a flat agricultural district to Preston, a distance of about 17 miles, including a change at Burslough, by the Lancashire and Yorkshire route. The principal engineering works are a heavy swing bridge, the first constructed under the new regulations as to wind pressure adopted by the Board of Trade since the fall of the Tay Bridge, over the river Douglas, a cutting of two miles, and a handsome bridge over the Ribble, just before running into Preston. By a short spur near that town a connection is made with the Lancashire and Yorkshire system, over which the company hold running powers to Blackburn. The works on the line have been carefully and substantially executed. This was evident from the steady running of the heavy train conveying the guests to Preston, which was under the immediate superintendence of Mr. Thomas Gilbert, the general manager of the company, and the fact that the company carried some 30,000 passengers to the Preston Guild celebrations without accident, although the first passenger train had only been run on the previous day. Amongst the guests at the luncheon were Mr. Joseph Dodd, M.P., Capt. Aylmer, M.P., Col. Hesketh, Mr. Holden, the Mayors of Preston, Southport, and Blackburn, Mr. E. C. Maddison, Mr. Stretton, Mr. C. D. Fox, Mr. McDermott, Mr. E. C. Norton, &c. In the evening there was a concert at the Winter Gardens, at which Signor Foli, Miss Cummings, and other artistes sang.

The Broxburn Oil Company.—A number of the shareholders, about 300, visited the works at Broxburn on Saturday. Four parties under separate guidance were formed, and a systematic inspection of the extensive works was made, the visitors being first taken to a shale pit, and thence through the departments in which the oil is distilled and refined, sulphate of ammonia manufactured, paraffin scale extracted, and candles made. Subsequently luncheon was served in the village schoolroom. Mr. Steel, Chairman of the company, presided. The usual loyal toasts having been duly honoured, the Chairman gave "Prosperity to the Broxburn Oil Company." In doing so he said that the shareholders had every reason to be satisfied with its present position, the more especially when they recollected

how matters stood on the last occasion—three years ago—when an official inspection of the works was made. At that time only four mines were opened up; now there were six, producing no fewer than 800 tons of shale per diem. Three years ago they were making at the rate of 4,000,000 gallons per annum, against over 8,000,000 at the present time. Working at this rate the production of the works was over 80,000 barrels of burning oil and naphtha per annum, over 6000 tons of lubricating oil, and over 3000 tons of wax. (Applause.) In addition to this they were making 2000 tons of sulphate of ammonia and large quantities of by-products in the shape of gas, oil, grease, &c., which all contributed to the revenue of the company. He might say in round numbers that they consumed over 1100 tons of minerals in the shape of shale and coal every working day of the year, and that they employed fully 1200 men, and had 430 houses, a number which was hardly sufficient for the requirements of the company. Mr. Kennedy, managing director, in responding, said that one of the greatest sources of gratification to him was that from a financial point of view no one had been in any way injured by the large additions that had been made to the works. He said that he had been frequently asked how it was that the company was able te compete with the giant petroleum, the production of which was now getting beyond all bounds. The oil pumped from mother earth was of a very light gravity, and was principally composed of burning oil and naphtha. While the company had only 40 per cent. of burning oil and naphtha from the crude, they had about 90 per cent.; and they were far ahead in the heavier and more valuable products. A number of other toasts followed, and the company afterward left by special train.—*Glasgow Herald.*

THE GOLD AMALGAMATING COMPANY.

The directors have decided to close the list of applications to-day (Saturday), and it is understood that a fair number of shares have been applied for, and that the allotment will, therefore, be made. With reference to the process which the company is to acquire, the subjoined correspondence has appeared in the Times:—

Mr. WILLIAM CROOKES, F.R.S., (Sept, 11), writes:—I have seen in your City Article a notice of a new process of gold amalgamation by means of a "secret process," for the purchase of which a company is sought to be formed. The prospectus of the proposed company goes fully into the reasons for waste of mercury by flouring or sickening and loss of gold by refusing to amalgamate. More than 17 years ago I discovered that the addition of a very small quantity of metallic sodium to the mercury used for the extraction of gold and silver by the amalgation process greatly increased the affinity of mercury for the precious metals, and enabled the miner to work the most intractable ores with profit. I do not wish to suggest that Mr. Readwin's "secret process" is nothing more than the sodium amalgamation process which he and I experimented on in Wales soon after its discovery, but every word describing the virtues of the "secret process" in the prospectus tallies so accurately with that of the action of sodium amalgam that it is difficult to believe that two dissimilar processes should have results so nearly alike as to require identical language for their description. I have long ceased to have any pecuniary interests in the patents for this process—indeed, they have long since lapsed—but Messrs. Johnson and Matthey, who prepared the materials for me, tell me that since the publication of my process there has been a steadily increasing demand for sodium amalgam, and that their long experience in the treatment of refractory gold ores from all parts of the world shows that whatever Mr. Readwin's "secret process" may be it can scarcely be more effective than the well-known sodium process.

Mr. T. A. READWIN, F.G.S. (Sept. 13), writes:—In reply to my friend Mr. Crookes's letter under the above heading in the Times of to-day, I have to say:—Firstly, that, as he says, I did, more than 17 years ago, experiment with him upon the application of sodium amalgam for the extraction of gold. We were, therefore, then equally conversant with the action and virtues of sodium amalgam. Secondly, Mr. Crookes says he does not "wish to suggest that Mr. Readwin's secret process is nothing more than the sodium amalgamation process which he and I experimented on in Wales soon after its discovery," but he nevertheless does suggest it. In reply to this suggestion, I hereby publicly challenge him and Messrs. Johnson and Matthey to attend personally or by representative at the company's works at East Greenwich, they to bring their own sodium amalgam, and I will use my own preparation. We will then, under the same conditions, treat refractory ores, and by the results I will abide. As his "suggestion" has been made publicly, he is bound in honour and in the interest of the public to accept my challenge. I have sent a copy of this letter to Mr. Crookes and Messrs. Johnson and Matthey.

The reply of Mr. Readwin certainly displays a laudable desire for investigation, and would really seem to indicate that he does really possess some secret. This is especially satisfactory, as in the present state of chemical knowledge it is unreasonable to suppose that any secrecy could be maintained with regard to the constituents of a compound submitted to systematic analysis; indeed there are many chemists who would not hesitate to guess the nature of the mystic liquid mercury improver even from watching the reactions during Mr. Readwin's experiments. Mystery or no mystery is not, however, so much a question of importance as whether he can profitably extract gold from stuff which has heretofore been workable only at a loss; if he succeeds in this he will be able to laugh at those supposed to possess chemical knowledge, and at those who have withheld their support.

THE VAN MINES—MONTHLY REPORT.

Sept. 14.—As under I beg to forward you my monthly report upon this mine. At the 120 west end we have cross-cut south 7 fms., and are still in lodey ground, yielding good patches of lead at times; what this will lead to we cannot yet say, but it is not improbable that it may be the top of another run of ore ground. We shall continue the driving of the cross-cut until we reach the hanging-wall, and when this is reached we shall drive west. At the present end of the 105 east we are crossing north to prove the lode, which we find well charged with blende and small strings of lead, but the ground being hard we have not made much progress. At the 15 east we have crossed south 7½ fms., but have not yet reached the country rock. In crossing we intersected a small rib of lead ore worth about 6 cwts. per fathom. When we have reached the hanging-wall of the lode we intend driving along this leader to prove its extent. Edward's shaft is squared and timbered for 9½ fms. below the 45. In about another four weeks I expect we shall have it completed to the 60. The stopes throughout the mine are much the same value as last reported, except those in the back of the 90, which do not yield so well, but as we get nearer the 75 we look for an improvement.—Van Hill: At the lower cross-cut we are still crossing through a large lode, in which we have seen some nice spots of lead ore, but not to value. We have not yet reached the hanging or south wall. On the western side of the hill the lode has not looked so promising for the last few days, and I have removed the men for a short time. Everything at surface is going on regularly. Machinery in good order. Our four-weekly sale of 200 tons of lead and 100 tons of blende takes place to-day. We are getting on well with our harvest operations, and if the fine weather holds for a few days longer we shall have secured our crops.—W. H. WILLIAMS.

From Mr. JOHN B. REYNOLDS:—It seldom happens for us to observe a more cheerful outlook than presents itself just now. With abundant harvests, decidedly improving trade, healthy tone of the markets for metals, success in Egypt, better order in Ireland, really we do not see how the anticipations of the most sanguine are not easily justified. We are glad to notice a better demand for gold, and that the Bank has been obliged to raise the rate is a capital indication. The worst feature observable of late has been the absence of demand for money. It has been worth next to nothing. Those who obtained 4 per cent. with safety have been lucky, and those who have been content with this have been wise. The old adage of "Fools and their money are soon parted" has been unhappily illustrated very often, but fortunately the large majority have been wise, and thus it happens that enormous sums of money are now waiting for investment. It is a thankless task to caution people against schemes which are never intended to pay. There are certain men who are never happy unless they are being deceived, and it is almost cruel to disturb their equanimity. On the other hand, it is most cheering to note how cautious first-class firms are before they recommend anything. No one has a right to advise unless he is well qualified to do so by long experience, and upon evidence which cannot be called into question.

One of the prominent features of the week in mining circles has been a disappointing one. Everybody wishes well to Wheal Agar, or ought to do so, and thus we regret to find further accidents with the machinery. Now, all this will, of course, be overcome in time, but would not a full and unbiassed report and recommendation, followed up at once by a bold and vigorous policy, result in amazing profit to the company? After all, this mine ought to be put right for the sake even of mining interests in Cornwall. All of us who have to do with public companies ought to be criticised, and it seems to us our friends in Cornwall, who are supposed to know all about their business, will be none the worse for a little waking up. Wheal Agar is a locally-managed mine. Heavy debit balances, and the practice of putting off the evil day, will not bear the light, and in the long run the policy is simply ruinous.

We confess to amazement at some of the proceedings at mine meetings which are unfortunately reported. We regret the necessity for saying this, much the more because of our admiration for Cornish management as a rule. It is marvellous the regularity and rectitude which distinguish our leading mining gentlemen in Cornwall; but at the same time we cannot but admit that there is an absence of common sense as far as finance is concerned. East Pools have drooped, and our old friends the "bears" are in good spirits again. A little more caution on their part as far as East Pool is concerned would not, however, be unwise. A rush is threatened for certain shares which need not be named. A great demand exists for shares, which are recommended by nobody—that is, publicly. These securities are bought on reliable and local information. Those are fortunate who have the benefit of it. "What has been is that which shall be." Everybody will know in November next what the prize of 1882 is, and it may be a very easy matter to anticipate the prizes which will follow, for in a certain district there will be more prizes than one in the near future.

SPECULATIVE MANIA.—In a pamphlet entitled "John Bull's Gullibility" the author gives an outline of several of the principal manias which there have been since the time of the South Sea Bubble. The object of the writer is, of course, to obtain correspondents, but it by no means follows that those who read the pamphlet (London: James Turner) must enter into further business relations with the author. It is easy to be wise after an event, and it may safely be said that capitalists are well able to take care of themselves if they be disposed to do so; they well know that in subscribing for shares in a new undertaking promising 60 per cent. per annum they take 40 times the risk of investing in Consols, but they look for their profit not to dividends but to re-sale of their shares to greater simpletons than themselves at an advanced price. In this they are frequently disappointed, and it is only then that they first publish the falsehood that they put in their money as an investment. It is the knowledge of this fact that enables pamphleteers and circularisers to induce those who have money to spend to throw it into, it may be worthless, concerns in which they have shares to sell. So far as the record of "John Bull's Gullibility" should teach caution it is worthy of commendation; it is ably and carefully written, and may be read with advantage by a very large number of speculators.

STEAM-ENGINES.—The value of the steam-engines exported last month was 310,286*l.*, and in the eight months of the year 2,372,549*l.*, against 2,187,565*l.* in the corresponding period of last year.

STRONGLY RECOMMENDED.
GOGINAN SILVER-LEAD MINE (LIMITED).
NORTH GROGWINION SILVER-LEAD MINE (LIMITED).
THE UNDERSIGNED have SPECIAL BUSINESS in the ABOVE.
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FOR SALE, BY PRIVATE CONTRACT, a valuable productive LEAD MINING PROPERTY in Cardiganshire, held on favourable terms, fully equipped with modern machinery worked by water power for raising and dressing the ore.
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VALUABLE SILVER-LEAD MINE IN WALES FOR SALE.
There is a water-wheel and other machinery already erected, and immediate returns of ore can be made.
Also the LEASE of an UNDEVELOPED PROPERTY in WALES, showing rich silver-lead at surface.
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LA PLATA LEAD MINES.—FOR SALE, in ONE LOT, TWO HUNDRED AND FIFTY SHARES at £2 2s. 9d. per share nett cash.
Apply to Mr. AXEXANDER DAVIDSON, Leadenhall House, Leadenhall-street, London, E.C.

THE DEVON COPPER AND BLENDE MINING COMPANY (LIMITED).
Notice is hereby given, that at an Extraordinary General Meeting of the members of the above company held on the 14th inst., at 2, St. Peter's-alley, Cornhill, E.C., a Resolution was passed appointing the Secretary (Mr. W. BAWDEN SKEWIS) and Mr. F. FWINCH, LIQUIDATORS to WIND-UP the business of the company. W. BAWDEN SKEWIS, Secretary.
2, St. Peter's-alley, Cornhill, London, E.C., 15th September, 1882.

STOCK EXCHANGE SPECULATION ON THE ONLY SAFE SYSTEM.
Losses Limited to 1 or 2 per cent.
LARGE PROFITS CAN BE REALISED.
PUT OR CALL OPTIONS.
Our Circular on OPTIONS will be forwarded on application, containing full explanations of the system. Everyone desirous of making money should study it. By the mode adopted the profits are unlimited, and the losses strictly confined to the amount paid for the PUT or CALL.
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A Printed Register of non-quoted Shares for Sale and Purchase is kept, free of charge, for the convenience of clients.
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SPECIAL NOTE.—Buyers should ascertain my price before going elsewhere.
* THESE ARE CHEAP SHARES, WORTH BUYING FOR A GOOD RISE.
All these Mines are looking well, and at present prices shares should be bought.
FOR SALE, the following shares. OFFERS CAN BE MADE FOR ANY OF THE LOTS:—

*300 Almada.	250 La Plata, £2 2s. 9d.	300 Sortridge, 4s.
*120 Bratsberg.	*200 Michipicoten, 17s. 6.	40 Tamar Silver-Lead.
40 Devon Great Consols.	*57 Mona (one lot).	200 Tankerville, 6s. 3d.
*400 Devon Friendship,	*105 Organos Gold.	70 Van.
150 Drakewalls, 9s. 9d.	*200 Orita Gold.	*300 West Crebor.
*450 East Blue Hills, 9s 6	350 Parys Mountain, 7s 6	150 West Devon.
*125 East Craven Moor.	200 Prince of Wales.	110 Wheal Crebor, £2 3s.
100 Herodsfoot, 4s.	100 Richmond.	100 Wheal Hony and Trelawney, £2½.
200 Kit Hill.	20 Roman Gravels.	

MR. W. B. COBB, STOCK AND SHARE DEALER,
29, BISHOPSGATE-STREET, LONDON, E.C.

ABBOTT AND CO., STOCK AND SHARE DEALERS,
9, CORNHILL, LONDON, E.C.
BUYERS of ONE THOUSAND SILVER HILL shares. Sellers please state lowest price.

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MR. E. PRITCHARD, a practical Quarryman and experienced Manager, is OPEN to INSPECT SLATE QUARRIES, and report the same on the most reasonable terms. Will also undertake to work Quarries paying royalty.
For further information, apply at Glandur House, Llanberis.

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MINING AND CONSULTING ENGINEERS,
2, GREAT GEORGE STREET,
WESTMINSTER.

ENGLISH CAPITALIST wishing a CORRECT REPORT on the SILVER MINES of COLORADO will do well to apply to—
Capt. DANIEL ROBERTS, Georgetown, Colorado.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 12	Foxdale	100	£11 18 6	Walker, Parker, & Co.
	D'Eresby Mountain	20	9 5 0	Adam Eyton.
	Lisburne	60	10 8 0	Weston, Son, and Co.
	Cwmystwyth	30	8 12 0	Adam Eyton.
	East Darren	20	12 1 0	Panther Lead Co.
14	Central Foxdale	100	13 17 0	Weston, Son, and Co.
	Talargoch:—			
	Maesyrewddu	40	10 2 6	Walker, Parker, & Co.
	ditto	40	10 0 6	ditto
	Coetia Llys	10	10 2 6	Quirk, Barton, and Co.
	North Hendre	80	9 14 0	Adam Eyton.
	ditto	50	9 15 6	Walker, Parker, & Co.
	ditto	50	9 16 6	Quirk, Barton, and Co.
	ditto	25	9 16 6	ditto
	ditto	25	9 16 6	Walker, Parker, & Co.
	Rhosesmor	40	9 15 0	Adam Eyton.
	ditto	40	9 16 6	Walker, Parker, & Co.
	East Long Rake	5	9 8 6	ditto
	Coetia Mawr	4	9 5 0	Adam Eyton.
	Van	120	10 8 6	Walker, Parker, & Co.
	ditto	40	10 14 6	ditto
	ditto	40	10 10 6	J. Walton and Co.
	Carnarvon Gt. Con.	30	9 2 6	Walker, Parker, & Co.

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 13	Talargoch	65	£ 3 8 0	Pascoe, Grenfell, & Sons
	ditto	65	3 7 0	ditto
	ditto	130	3 6 0	ditto

Frongoch has sent to market 150 tons of Blende, and will have a similar parcel ready before the end of the month.

ARGENTIFEROUS COPPER MINE—TO CAPITALISTS.
WANTED, SEVERAL SUMS of £250 to £1000 to COMPLETE a SYNDICATE for the PURCHASE of a most VALUABLE MINE in the Basses Pyrenees, 11 hours only from Bayonne. Estimated annual returns at least 22 per cent. See report of English mining engineer (highest authority on Pyrenean Mines), sent on application. Contract with first Swansea house to take whole produce at liberal prices. Mine easily inspected by investors during present holidays.
Address, "A. C. M.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED, ONE or TWO GENTLEMEN, with small capital, to DEVELOPE a HIGHLY-PROMISING YOUNG TIN MINE in CORNWALL. Mine working by water machinery, returning tin.
For particulars, apply to Capt. J. EDWARDS, Polyan Consols Mine, St. Austell, Cornwall.

WANTED, PROMPT CO-OPERATION of a FINANCIAL AGENT in COMPLETING DEVELOPMENT of a very valuable MINING PROPERTY in private hands, which will take six months longer before machinery is ready and returns made. Liberal terms.
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COPPER MINES.—WANTED, a thoroughly trustworthy PRACTICAL MINING ENGINEER, to proceed to SPAIN at once, to EXAMINE and REPORT on a property containing copper. Knowledge of Spanish not nesessary.
Address, "Copper," MINING JOURNAL Office, 26, Fleet-street, E.C.

A YOUNG MAN (20), having a good knowledge of Analytical Chemistry, and who is thoroughly conversant with the French language, is desirous of MEETING with EMPLOYMENT in which those acquirements may be of service.
Address, "F. W. H.," 10, South-terrace, Camborne, Cornwall.

TO SHAREBROKERS AND OTHERS.
OFFERS WANTED for SHARES in WEST PHŒNIX (Cost-book) TIN AND COPPER MINE, near Liskeard; also for SHARES in NEW WHEAL PEEVOR (Cost-book) TIN MINE, Redruth. Calls will be all paid to date of transfer.
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SOUTH CARADON MINE, LISKEARD
SPARE MINE MATERIALS FOR SALE.—Apply to the Manager, on the Mine.
September 6, 1882.

TIN AND COPPER MINE FOR SALE, with MACHINERY, complete.
Apply to JOHN PARKER, Accountant, 58, West Regent-street, Glasgow.

PANULCILLO COPPER COMPANY (LIMITED).
The Directors have resolved to DISTRIBUTE, on 10th October next, an INTERIM DIVIDEND of SIX SHILLINGS PER SHARE, free of income-tax, or at the rate of 15 per cent. per annum, out of profits for the half-year ending 30th June, 1882, to shareholders on the company's register upon the 3rd day of October, 1882, leaving (subject to audit) about £6000 to be carried forward.
The Transfer Books will be closed during Tuesday, the 3rd of October next.
By order, J. S. ALEXANDER, Secretary.
23, Great St. Helen's, London, 12th September, 1882.

MINE "EL CALLAO."
GUAYANA, VENEZUELA.
COUPONS OF SHARES 322
Gold in bars produced in the month of July, 1882, and remitted to Messrs. Baring Brothers and Co., London, 8370·66 ozs.
DIVIDEND distributed for each coupon, $300.
(Signed) A. LICCIONI, President.
(Signed) VICTOR T. GRILLET, Treasurer.

NEW TERRAS TIN MINING COMPANY (LIMITED).
Those who are desirous of INVESTING HEREIN should apply at once to the Associated Mineowners' Corporation, Grampound-road Cornwall.

THE PYRITES SMELTING COMPANY (LIMITED)
Are prepared to TREAT PARCELS OF REFRACTORY GOLD and SILVER ORES.—38, Threadneedle-street, E.C.

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THE UNDERSIGNED would inform CAPITALISTS that they hold over ONE HUNDRED LICENCES for LAND in the various MINERAL SECTIONS of the Island, and are prepared to TREAT FOR A PORTION OF THE SAME, with a view of thoroughly prospecting such licences, and eventually working those upon which COPPER, LEAD, or other Mineral may be found. Each license comprises three square miles. Apply to—
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JAMES BROWNING.
St. John's, Newfoundland, April 17, 1882.

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IN
AMERICAN MINES
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Mines inspected and reported on. Assays and valuations effected.
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No. 1.—In Ingots, Bearings, &c. Wears four or five times as long as gun metal. For Bearings, &c., of moderate size, lubricated with oil.

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For further particulars and prices, apply to—

P. R. PARSONS, Manager,
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READY FOR INSTANT DELIVERY.

NEW.

TWO 12 in. steam cylinder, 8 in. water cylinder, 18 in. stroke, Colebrook's patent, each	£75	0	0
ONE 3 in.×2 in. brass lined, Colebrook's patent	15	0	0
ONE 3 in.×1½ in., Colebrook's patent	13	0	0
ONE 7 in.×5 in. Tangye Special, with Condenser	44	0	0
ONE Warner's improved treble barrel Horizontal Colliery Force Pump for horse power, 4 in. gun metal rams	54	0	0
TWO 5½ in. cylinder 9 in. stroke Donkey Pump, 3 in. in brass cased ram, each	22	0	0
ONE No. 1 Pulsometer and foot valve	9	0	0
ONE No. 3 „ „	24	0	0

SECONDHAND.

ONE Patent Universal, by Hayward Tyler and Co., 5 in.×3 in.	20	0	0
ONE ditto ditto 6 in.×5 in.	30	0	0
ONE ditto ditto 12 in.×5 in	60	0	0
ONE Horizontal Donkey, by Davey and Co., 8 in. stroke, 6 in. cylinder, 3 in. water course	15	0	0
ONE 3 in.×1½ in., suitable for feeding 6 H.P. boiler	4	0	0
ONE Wilson's Vauxhall, No. 6	7	10	0
ONE Donkey, 8 in.×10 in.×4½ in. plunger, double action, fitted with new box, new brass valves and seats	40	0	0
No. 1 Pulsometer	4	10	0
ONE 8 in. Centrifugal, by Gwynne and Co	28	0	0
ONE 4 in. „ by Amos and Son	11	0	0
ONE Holman's Double Force, 5 in. cylinders	10	0	0
TWO 4½ in. diameter plunger force, with gun metal plungers 2 ft. long, 4½ in. diameter, glands and barrels, brass bushed, valves and seatings, gun metal, &c., each	10	0	0
ONE Vertical Donkey, 15 in. steam cylinder, 10 in. water cylinder, 16 in. stroke, brass lined ram, single action	95	0	0
ONE Vertical Donkey, 15 in. steam cylinder, 8 in. water cylinder, 8 in. ram, single action	85	0	0

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OLD AND SILVER AMALGAMATING MACHINERY complete,
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SPECIAL DESIGNS FOR EXPORT AND DIFFICULT TRANSIT.

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THIRD EDITION

Just published.

THE NORTH WALES COAL FIELDS
Being a series of Diagrams showing the Depth, Thickness, and Local Names of the Seams in the principal Collieries of the various districts, with Index, Geological Map, and horizontal sections across the Ruabon, Brymbo, Buckley, and Mostyn districts.
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PURCHASES and SALES of MINING PROPERTY effected, with careful regard to the interests of clients.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Devon.

IN the MATTER of the COMPANIES ACTS, 1862 to 1880, and in the Matter of the WALKHAM UNITED MINES (LIMITED).
By an Order made by His Honor, the Vice-Warden of the Stannaries, in the said Matter, dated the 4th day of August last, on the Petition of JOHN NEILL, of No. 42, Poultry, in the City of London, Advertising Agent, trading under the style or firm of "The Universal Advertising Agency," claiming to be a Creditor of the said company, and on the Petition of GILBERT HOWARD TERRELL, of No. 84, Lombard-street, in the City of London, Gentleman, a Judgment Creditor of the said company, IT WAS ORDERED that the SAID COMPANY be WOUND-UP by the Court under the provisions of the Companies Act, 1862.
FREDERICK MARSHALL, Registrar.
TERRELL and HARRISON, 84, Lombard-street, London, E.C., Solicitors for the Petitioner, Gilbert Howard Terrell.
Dated Registrar's Office, Truro, this 11th day of September, 1882.

In the High Court of Justice—Chancery Division.
Vice-Chancellor Sir CHARLES HALL.

THE GRAND DUCHESS SILVER-LEAD AND BARYTES MINING COMPANY (LIMITED).
HIGHLY IMPORTANT SALE.

TO BE SOLD, BY PRIVATE TREATY, pursuant to an Order of the High Court of Justice, Chancery Division, the VALUABLE MINE, with BUILDINGS, PLANT, and MACHINERY, known as

THE CYSTANOG GRAND DUCHESS MINE,

Situated in the parish of Llangunnor, near the town of Carmarthen, with the right to work a considerable extent of property, including the farms of Penlan-Cystanog and Allt-Cystanog, for the term of 21 years from 1st. August, 1882.
For further particulars and to treat, apply to Mr. JOHN M. WINTER, Chartered Accountant, 16, Market-street, Newcastle-upon-Tyne; or to Mr. DAVID THOMAS, Surveyor and Auctioneer, 3, Blue-street, Carmarthen.

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SALE OF A MOST VALUABLE MINING PROPERTY, known as

THE EAST VAN MINE,

Situate adjoining to the celebrated Van Mines, and within 3 miles of the town of Llanidloes; 1 mile of Garth Road station, on the Van Railway; 6 miles of Caersws, and 7 miles of Moat Lane Junction, on the Cambrian Railways, in the County of Montgomery.

MR. LLOYD MORGAN has received instructions TO SELL the ABOVE MINING PROPERTY, comprising 180 acres or thereabouts, with the ENGINE-HOUSES, SMITHY, CARPENTERS' SHOP, OFFICE, THREE COTTAGES, POWDER-MAGAZINE, and other out-buildings, BY AUCTION, at the Trewythen Arms Hotel, Llanidloes, on Wednesday, the 20th September, 1882, at Three o'clock, P.M.
The Plant and Machinery, as per inventory, the whole of which is in excellent order, and recently fitted up regardless of cost, will have to be taken to by the purchaser at a valuation in the usual way.
Particulars and conditions of sale, with inventory of Plant and Machinery, and orders to view, may be had by applying to Messrs. TRINDERS and CURTIS HAYWARD, Solicitors, 14, St. Helen's-place, Bishopsgate Within, London; to Messrs. SNELL, SON, and GREENIP, 1, George-street, Mansion House, London; or the Auctioneer, Great Oak-street, Llanidloes.
Llanidloes, 16th August, 1882.

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BEVERLEY, NEAR HULL.

IMPORTANT AND EXTENSIVE SALE OF THE WHOLE OF THE VALUABLE BUILDINGS comprised in the ABOVE WORKS, together with the STEAM ENGINES, STEAM HAMMERS, TURRET CLOCK, various IRONWORK, OFFICE FITTINGS, and other effects.

MR. RICHARD NORFOLK, Contractor's Auctioneer, &c., is in receipt of instructions to Catalogue and SELL BY AUCTION, on Wednesday and Thursday, September 27th and 28th, 1882, commencing each day at Eleven o'clock prompt, at the Works, situate at Beverley, near Hull, the WHOLE of the

VALUABLE BUILDING MATERIALS,

Consisting of over 1,000,000 bricks, 8000 yards of slating, iron columns, girders, troughs, spouting, &c., several tons of lead, 100,000 feet of roofing timbers, beams, &c., large skylight, roofs, ridge tiles, coping stones, glazed windows, sliding doors, flagging, iron fence, iron grids, &c.
PAIR of powerful BEAM CONDENSING ENGINES, 1 20 cwt. and 1 40 cwt. STEAM HAMMER (Condie's patent), 3 iron furnace chimneys, 50 feet high, large time keeper tell-tale clock (by Heslop, Huddersfield), with various office fittings and other articles, of which full particulars will be given in future advertisements.
Meanwhile for Catalogues and further particulars, apply to Messrs. SLATER and TURNBULL, Solicitors, 20, Cooper-street; Messrs. BROOME, MURRAY, and Co., Accountants, 104, King-street; Messrs. WILLIAM MACPHERSON and SONS, Auctioneers, 55, Market-street, all of Manchester; or to the Auctioneer, Paragon-street, Hull, and Lady Gate, Beverley.
September 4th, 1882.

MANOR OF TREVEDDOE, WARLEGGAN, NEAR BODMIN, CORNWALL.
VALUABLE FREEHOLD MINING AND AGRICULTURAL PROPERTIES FOR SALE.

MR. S. PARSONS, Auctioneer, WILL SELL, BY PUBLIC AUCTION, at Sandoe's Royal Hotel, Bodmin, Cornwall, at Twelve noon precisely of Friday, the 13th October, 1882, subject to conditions to be then produced:—
THE MANOR OF TREVEDDOE, comprising TREVEDDOE BARTON (101 A. 2 R. 0 P., more or less); WARLEGGAN DOWN (19 A. 2 R. 16 P., more or less); TREVEDDOE WOODS (27 A. 3 R. 32 P., more or less); THE OLD TREVEDDOE MINE, PANTHER'S, or PANTER'S ORCHARD (about 1 A. 0 R. 1 P., more or less); LITTLE CARBURROW (16 A. 1 R. 26 P., more or less); WHITEWALLS, (14 A. 2 R. 37 P., more or less); GILLAS (8 A. 1 R. 0 P., more or less); SOUTH MAIDENWELL (23 A. 0 R. 33 P., more or less); an undivided third in CALLAWAY'S TENEMENT (4 A. 0 R. 38 P., more or less) on lease determinable on lives aged about 64 and 57; the like share in OUTER CALLAWAY'S TENEMENT (6 A. 1 R. 0 P., more or less in hand), and in SUSAN'S MEADOW (2 R. 29 P., more or less) on lease for life aged about 52, and in UNDER TOR and PLOT (1 A. 3 R. 29 P., more or less) on same lease, and the like share in CARBURROW TOR (entirety 83 A. 1 R. 13 P., more or less); HARDHEAD COMMON (entirety 166 A. 1 R. 30 P., more or less), and part DEWY MARSH (entirety 7 A. 0 R. 2 P., more or less).
The above are situate in the several parishes of Warleggan, Cardinham, and St. Neot.
All the properties are believed to be full of tin, china-clay, and other minerals. Over main parts of Treveddoe Barton a sett exists with proper provisions for metals and minerals other than stream tin, china-clay, and china-stone. The rest is available for all minerals at once, and the whole property is reputed to be full of minerals, china-clay, &c.
Applications for setts have been frequent. The property is of great agricultural value also. The district affords excellent hunting, fishing, and shooting.
The ancient Manor House is beautifully situated, has southern aspect, and commands views of the Glynn Valley, the Cornish hills, &c. It is surrounded by fine trees.
For cards to view apply to the undersigned. The tenant, at Treveddoe Barton, Mr. WEARY, will show the property.
For particulars and all further details, apply to
CECIL BRAY AND PETER, Solicitors, Holsworthy.
Dated 7th September, 1882

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The property is being sold in consequence of the death of the Lessee.
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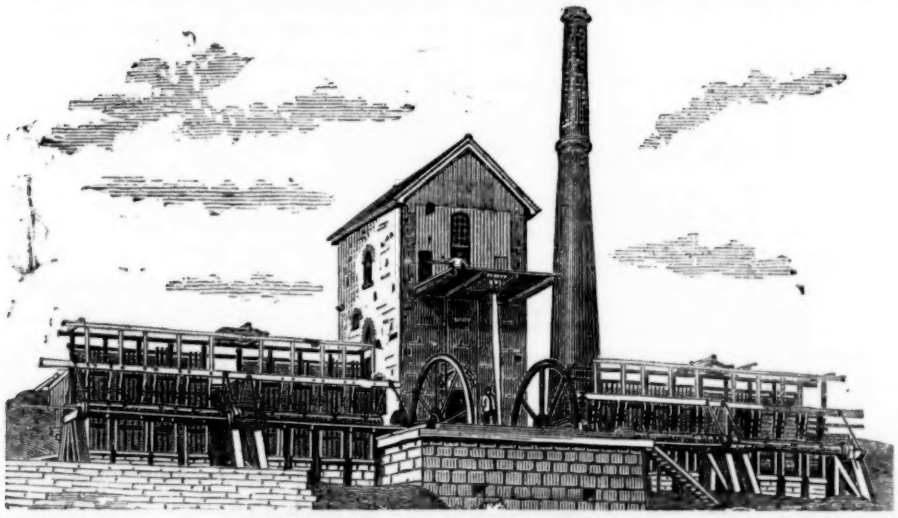

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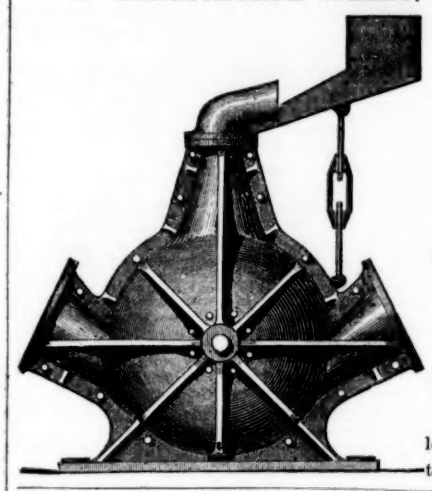

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Shares.	Company	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3200	Blue Hills t, c, St. Agnes	4 6 6	1¼	1 1¼	0 4 0	0 2 0	May 1881
6000	Carn Brea, c, t, Illogan†	9 7 11	11	10 11	52 11 8	0 10 0	Nov. 1881
10240	Devon Gt. Consols, c, a, Tavistock*†	1 0 0	5⅛	5 5⅛	118 7 0	0 0 6	Dec. 1880
4296	Dolcoath, c, t, Camborne	10 14 10	75	75 77½	131 6 3	1 12 6	July 1882
6400	East Pool, t, c, Illogan	0 9 9	52½	52 54	31 6 0	1 15 0	July 1882
12500	Frongoch,* l, Cardgn (11000 sh.iss.	2 0 0	2⅛	1¾ 2¼	0 4 0	0 2 0	Jan. 1881
12000	Great Holway,* l, Flintshire	5 0 0	5⅛	5 5⅛	0 5 0	0 5 0	Feb. 1882
15000	Great Laxey, l, Isle of Man*†	4 0 0	18½	18 18½	28 10 0	0 6 0	July 1882
6400	Green Hurth, l, Durham*	0 6 0	8¼	8 8¼	3 11 0	0 5 0	Apr. 1882
20000	Grogwinion, l, Cardigan*	2 0 0	1⅜	1¼ 1¾	0 16 4	0 1 6	July 1880
10240	Gunnislake (Clitters), t, c	2 2 0	3⅝	3⅜ 4⅛	0 19 9	0 2 0	Mar. 1882
2800	Isle of Man, l, Isle of Man*	25 0 0	—		83 5 0	1 0 0	Sept. 1880
6000	Killifreth, t, Chacewater	4 3 6	5⅛	4⅞ 5⅛	0 8 6	0 6 0	Aug. 1882
20000	Leadhills,* l, Lanarkshire	6 0 0	3⅛	3¼ 3½	0 18 0	0 3 0	Aug. 1882
400	Lisburne,* l, Cardiganshire	18 15 0	—		613 10 0	0 10 0	Sept. 1882
10000	Mellanear, c, Hayle*	2 6 0	5	4½ 5	1 16 0	0 2 0	Aug. 1882
9000	Minera Mining Co., l, Wrexham*	5 0 0	9	7½ 8	69 4 8	0 1 0	Aug. 1882
20000	Mining Co. of Ireland, cl, c, l	7 0 0	—		24 0 0	0 2 6	Jan. 1880
8000	Mona,* c, Anglesea	5 0 0	5	4½ 5	0 10 0	0 10 0	July 1880
11829	North Hendre, l, Wales	2 10 0	—		3 14 0	0 2 6	Nov. 1881
8146	Ditto	1 5 0	—		0 9 3	0 1 3	Nov. 1881
2000	North Levant, t, c, St. Just	13 6 0	5⅛	4½ 5⅛	4 16 0	0 3 0	Feb. 1881
4760	Penhalls, t, St. Agnes§	4 0 0	⅜	⅜ ⅜	3 17 0	0 1 6	Jan. 1881
6000	Pennant, l, bar, North Wales*	5 0 0	5	4½ 5	0 10 0	0 5 0	Mar. 1876
12000	Phœnix United, t, c, Linkinhorne	6 0 3	3⅛	3 3½	17 4 0	0 2 0	Aug. 1882
18000	Pr. Patrick,* s-l, (als.12000 pf.10 p.c)	1 0 0	—		0 18 6	0 2 0	July 1880
10000	Red Rock,* l, Cardigan	2 0 0	—		9 4 0	0 2 0	Jan. 1878
12000	Roman Gravels, l, Salop*	7 10 0	9	8½ 9	9 1 0	0 5 0	May 1882
4000	Rhydalun,* l, Wales	10 0 0	—		0 5 0	0 5 0	Feb. 1880
512	South Caradon, c, St. Cleer†	1 5 0	12½	10 15	749 0 0	1 0 0	July 1880
6123	South Condurrow, t, c, Camborne†	6 5 6	9	9 9½	9 9 0	0 6 0	Aug. 1882
9000	South Darren, l, Cardigan*	1 10 0	1	¾ 1	0 4 0	0 2 0	Apr. 1880
6000	South Wheal Frances, t, Illogan†§	9 2 4	12	11 13	40 15 6	0 10 0	July 1880
6000	Tincroft, c, t, Pool, Illogan†§	11 10 0	12½	12½ 13½	51 3 6	0 5 0	Dec. 1881
15000	Van, l, Llanidloes*	4 5 0	6	5½ 6	25 10 6	0 2 6	July 1882
12000	West Holway,* l, Flintshire	1 0 0	1¾	1¼ 1¾	0 1 0	0 1 0	Oct. 1889
512	West Tolgus, c, Redruth§	98 0 0	20	17 19	33 0 0	1 0 0	Jan. 1871
2400	West Wheal Seton, c, Camborne†§	15 0 0	17½	15 17½	111 10 0	0 3 9	Apr. 1878
6000	West Basset, c, Illogan†	7 0 4	10	9 10	28 3 8	0 6 8	Apr. 1882
12000	Wheal Crebor, c, Tavistock	2 4 0	2½	2⅛ 2⅜	0 13 9	0 1 0	Mar. 1882
15000	Wheal George,* l, bl, Carnarvon	1 0 0	—		0 1 0	0 1 0	Feb. 1882
6000	Wheal Grenville, t, Camborne	15 0 0	11	9½ 10½	1 12 6	0 5 0	Sept. 1882
4295	Wheal Kitty, t, St. Agnes§	5 12 0	2½	2 2½	12 18 6	0 1 6	Jan. 1881
3000	Wheal Peevor, t, Redruth	7 11 0	8	6 6½	8 13 6	0 4 0	Mar. 1882

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Shares.	Company	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500	Alamillos, l, Spain*†	2 0 0	2	1½ 2	2 5 8	0 1 8	Mar. 1882
130000	Almada and Tirito Consol., s*†	1 0 0	¾	½ ¾	0 6 3	0 1 0	May 1876
20000	Australian, c, South Australia†	7 7 6	2¾	2¼ 2¾ xd	1 7 6	0 2 0	Aug. 1882
15000	Birdseye Creek, g, California*	4 0 0	1⅝	1⅜ 1⅝	1 1 0	0 3 0	June 1882
20000	Cape Copper Mining,*† South Africa	7 0 0	53	52 54	48 7 6	1 0 0	Sept. 1882
50000	Copiapo, c, Chili* (£4 shares)†	3 8 0	3¾	3¼ 3¾	1 18 9	0 1 0	Sept. 1882
70000	English & Australian,*† c, S. Aust.	2 10 0	1⅜	1⅛ 1⅜	3 0 9	0 1 0	Mar. 1882
2000	Eng.-Aus., g, Vict.* pref. (20000 o.)	1 0 0	⅝	⅜ ⅝	0 3 8	0 3 8	Apr. 1882
25000	Fortuna, l, Spain*†	2 0 0	4	3½ 3¾	8 1 0	0 1 10	Mar. 1882
60000	Frontino & Bolivia, g, New Gran.*†	2 0 0	2¾	2½ 2¾	0 9 0	0 1 0	July 1882
200000	La Plata, s-l, Leadville†	2 0 0	2¾	2 2¼	0 11 8	0 0 5	July 1882
15000	Linares, l, Spain*†	3 0 0	4	3¼ 3¾	18 19 10	0 2 0	Mar. 1882
185164	Mason & Barry* c, Portugal	10 0 0	18	17½ 18	1 5 0	0 15 0	May, 1882
66000	New Quebrada, c, Venezuela†	5 0 0	4¾	4¼ 4¾	0 9 0	0 3 6	Aug. 1882
1000	Ditto, Debentures	100 0 0	98	93 98	6 per cent.		
3000	Oregon, g, Oregon, U.S. (pref. sh.)	4 0 0	—		0 2 6	0 2 6	Dec. 1880
60000	Panulcillo, c, Chili*†	4 0 0	7	6¾ 7¼	1 6 9	0 6 0	Oct. 1882
25000	Pitangui,* g, Brazil (in. 6000 £1 pd).	0 10 0	—		0 1 0	0 1 0	Sept. 1880
14000	Pontgibaud, s-l, France†	20 0 0	14	13 15	28 17 6	0 7 3	Dec. 1880
100000	Port Phillip, g, Clunes*† (£2 shares)	1 0 0	¼	⅛ ¼	1 14 2	0 0 10	Feb. 1881
50000	Rara Fortuna,* s, Argent. Republic.	1 0 0	2⅛	2 2⅛	0 3 0	0 1 0	July 1882
54000	Richmond Consol., s, Nevada*†	5 0 0	8½	7½ 8	13 16 6	0 5 0	Aug. 1882
24532	Rio Tinto,* c, Mortgage Bds., Huelva.	100 0 0	102	100 102	5 per cent.		July 1880
225000	Ditto, shares	10 0 0	27	26 27	1 12 0	0 16 0	Apr. 1882
40000	Santa Barbara,* g, Brazil	0 10 0	—		0 12 9	0 1 0	May 1882
120000	Scottish-Australian Mining Co.*†	1 0 0	1⅞	1⅝ 1⅞	10 p. cent.		Apr. 1882
80000	Ditto, New	0 10 0	1	¾ 1	10 p. cent.		Apr. 1882
22500	Sierra Buttes, g, California*†	2 0 0	1⅛	1⅜ 1⅝	2 4 0	0 1 6	Apr. 1882
40625	Ditto, Plumas Eureka	2 0 0	1⅝	1⅛ 1⅜	2 16 0	0 3 0	Apr. 1882
253000	St. John del Rey*† (£5 Stock and multiple dealt in)			150 170	5 p.c. for half-year,		June 1882
160000	Tambracherry,* g, Wynaad	1 0 0	1⅛	⅞ 1⅛xd	0 0 6	0 0 6	Aug. 1882
91896	Tharsis,* c, sul, Spain (31100 s. 7l. p.)†	10 0 0	41½	40½ 41½	31 6 0	2 10 0	May 1882
20000	Tolima,* g, s, Colombia (A & B shares)	5 0 0	3½	2½ 2¾	2 1 6	0 5 0	Dec. 1881
25000	Victoria* (London), g, Australia	1 0 0	—		0 13 10	0 0 8	Feb. 1881
100000	Victorine (Nevada, U.S.) Deb. Bds.	1 0 0	—		0 2 0	0 0 6	June 1882
5000	Western Andes, s, Colombia	5 0 0	—		3 17 6	0 3 0	Aug. 1882
2100	W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	10	9 10	4 2 0	0 8 0	Apr. 1881
64800	Yorke Pen., c, South Aust. Pref.†	1 0 0	1⅛	⅞ 1⅛	0 3 0	0 3 0	May 1882

§ Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Company	Paid.	Last wk.	Clos pr.
25000	Aberduna,* l, Denbigh	1 10 0	—	1 1½
30000	Alston United,* l, Cumberland	1 0 0	—	
12000	Anderton, t, c, l, Devonshire	1 0 0	1½	1¼ 1½
12000	Assheton, l, Carnarvonshire*	5 0 0	—	
12000	Bedford Unit.,* c, Tavis. (£1 liab.)	0 12 0	2¼	2⅛ 2⅜
30000	Bodidris,* l, bl, Denbighshire	1 0 0	—	
30000	British,* s-l, bl, Wrexham	1 0 0	—	⅞ 1⅛
30000	Beuno Consols,* s-l, Flintshire	1 0 0	1¼	1 1¼
20000	Bwlch United,* l, Cardigan	0 17 6	1¾	1½ 1¾
50000	Carn Camborne,* t, c, Camborne	1 0 0	1⅜	1⅛ 1⅜
20000	Carnarvon,* c, Carnarvonshire	1 0 0	½	⅜ ½
37500	Carnarvonshire Cons.,* l, Llanrwst.	2 0 0	1¼	1⅛ 1¼
6000	Cathedral Cons., c, t, Gwennap	0 18 0	—	
20000	Central Foxdale,* l, Isle of Man	1 17 6	—	
25000	Coed-y-Fedw & Pant-y-Buarth,* l	1 0 0	1¼	1 1¼
2450	Cook's Kitchen, t, Illogan†‡	30 14 9	42½	37½ 42½
10000	Cornwall Great Cons.* (4500 issued)	1 0 0	—	
6400	Crook Burn,* l, Cumberland	0 17 0	½	⅜ ½
14000	Crosswood Mining Lands, l*	1 0 0	—	
45000	D'Eresby Mountain, l, bl, Llanrwst.	0 10 0	1½	1 1½
12000	Derwent,* l, Durham	4 0 0	1¼	1 1¼
53000	Devon,* c, bl, Tavistock	1 0 0	—	
60000	Devon Friendship,* c, ars, Tavistock	1 0 0	5/16	3/16 5/16
12000	Devon Great United* (2l. shares)	1 5 0	¾	½ ¾
50000	Drakewalls,* t, c Calstock	0 15 0	¾	½ ¾
10000	Dubby Syke, l, Durham*	1 0 0	—	
12000	East Blue Hills, t, St. Agnes	0 5 0	9/16	7/16 9/16
6000	East Botallack, t, St. Just	0 12 6	1¼	1 1¼
6144	East Caradon, c, St. Cleer‡	4 11 0	⅞	⅝ ⅞
4000	East Chiverton, l, Perranzabuloe	10 12 3	1¾	1¼ 1¾
30000	E. Craven Moor,* l, Pateley Bridge	1 0 0	¾	⅝ ¾
15000	East Devon Cons.,* c, Buckfastlgh.	2 0 0	3	2½ 3
30000	East Herodsfoot, s-l, Liskeard	1 0 0	1	¾ 1
20000	East Long Rake,* l, Wales	1 0 0	—	
25500	East Roman Gravels,* l, Salop	1 0 0	¾	½ ⅝
18000	East Van, l, Llanidloes*	5 0 0	—	
2043	East Wheal Lovell, t, Helston	15 13 6	1½	1 1½
100000	East Wheal Rose,* s-l, Newlyn East	1 0 0	⅞	13/16 15/16
12000	Gawton,* c, Tavistock (2l. shares)	1 18 0	½	⅜ ½
40000	Glasg. Car., c* [30000 sh. £1 pd., 10000 15s. pd.]		¾	½ ¾
14000	Glenroy,* s-l, Isle of Man	4 0 0	⅜	¼ ⅜
10000	Goddards,* l, b, Carnarvon	1 0 0	1¼	1⅛ 1⅜
32000	Goginan,* l, Cardiganshire	1 0 0	1¼	¾ 1¼
25000	Goodevere, t, St. Cleer	1 0 0	1⅜	1⅛ 1⅜
8500	Gorsedd and Merllyn Con., l, Flint.	2 10 0	3	2½ 3
15000	Gover Consols*	1 0 0	⅝	⅜ ⅝
20000	Great Dyliffe* (10000 sh. issued)	1 0 0	—	
100000	Great Polgooth United,* t	1 0 0	½	⅜ ½
6000	Great West Chiverton, l, St. Agnes.	0 5 0	⅜	¼ ⅜
10000	Gwern-y-Mynydd,* s-l, Flint (pref.)	4 0 0	1⅛	⅞ 1
70000	Gwydyr Amal.* l, bl, Carnarvon	1 0 0	—	
12000	Herodsfoot, l, near Liskeard†	18 0	⅜	3/16 ¼
18000	Hingston Down, c, Calstock*†	0 12 0	⅞	⅝ ⅞
10000	Indian Queen Consols*	1 0 0	⅜	¼ ½
20000	Kirkmichael,* l (2000 unissued)	1 0 0	—	
25000	Kit Hill Gt. Cons.,* c, ars-m, (2l. sh.)	0 15 0	¾	½ ¾
15000	Lady Ann,* s-l, Llanarmon	1 0 0	—	
30000	Lady Ashburton,* s, Callington	1 0 0	⅛	1/16 ⅛
15000	Lady Bertha,* c, Tavistock	1 0 0	—	
25000	Langford,* s, c, Callington	0 10 0	½	⅜ ½
2500	Levant, c, t, St. Just	11 10 0	8	7 8
15000	Llandegla,* l, Wales	1 0 0	—	
5120	Lovell, t, Wendron	0 16 0	⅜	⅛ ⅜
9000	Marke Valley, c, Linkinhorne‡	6 15 0	⅝	⅜ ½
6000	Medlyn Moor, t, Wendron	3 15 10	—	
20000	Mona Consols,* c, Anglesea	1 0 0	1¼	1 1¼
15000	Monkstown,* man, Devon	2 0 0	3¼	3 3¼
20000	Mostyn Consols,* s-l, Flint	1 0 0	3	2½ 3
10000	Mynydd Gorddu, l, Cardigan*	4 0 0	—	
12000	Morfa Du, z, g, s, Anglesea*	1 0 0	⅝	⅜ ⅝
80000	Mounts Bay,* c, t, Breage	1 0 0	⅝	½ ⅝
6144	Mount Carbis, t, c, Redruth	1 5 0	4½	4¼ 4½
2400	New Cook's Kitchen, t, Illogan	8 18 0	6	5 7
8000	New Dolcoath, t, c, Camborne*	3 0 0	—	
100000	New Great Wheal Vor, t, Breage	0 10 0	—	
10000	New Holmbush,* t, c, Callington	3 0 0	—	
6000	New Kitty, t, St. Agnes	0 12 0	2¾	2½ 2¾
12000	New Penrose,* t, c, Helston	1 0 0	1¼	1⅛ 1¼
15000	New Redmoor,* var, Callington	1 5 0	—	
17500	New Terras,* t, St. Austell	0 5 0	⅜	¼ ⅜
3500	New Tincroft,* t, Lelant	6 0 0	—	
12000	New Trumpet,* t, Wendron	1 0 0	1¼	1 1¼
12000	New West Caradon, c, Liskeard	0 4 6	¼	⅛ ¼
3000	New Wheal Peevor, t, Redruth	0 10 0	—	
35000	New Wye Valley, l, Montgomery.*	1 0 0	1	¾ 1
12000	North Blue Hills, t, St. Agnes	0 2 6	¼	⅛ ¼
5328	North Busy, t, c, Scorrier‡	1 5 8	⅞	⅝ ⅞
10000	N. D'Eresby Mount.,* l, bl, Carnarv.	1 0 0	—	
25000	North Goginan,* l, Cardiganshire	1 0 0	1¼	¾ 1¼

NON-DIVIDEND MINES—*continued.*

Shares.	Company	Paid.	Last wk.	Clos pr.
6400	North Green Hurth,* (3400 1l. pd.)	0 2 6	⅜	¼ ⅜
25000	North Grogwinion,* s-l, Cardigshr.	1 0 0	1¼	¾ 1¼
12000	North Herodsfoot, l, Liskeard	0 12 6	½	⅜ ½
50000	North Molton,* c, mn, t, Devon	1 0 0	—	
6000	North Penstruthal, t, c, Gwennap	2 7 6	½	½ ⅝
2936	North Treskerby, c, St. Agnes	1 0 0	—	
8000	Northern,* l, Durham	8 17 10	¾	¾
40000	Okel Tor,* t, c, a, Calstock	1 0 0	—	
80000	Old Shepherds s-l, Cornwall	1 0 0	½	¼ ½
60000	Owen Vean & Tregur.,* t, c, Marazion	1 0 0	1¼	1⅛ 1¼
12000	Pandora,* l, Carnarvon	2 0 0	¼	⅛ ¼
11612	Pant-y-Mwyn,* l, Mold	2 0 0	2	1½ 2
20000	Parka Consols*	1 0 0	½	⅜ ⅝
45000	Parys Corporation,* c, Anglesea	1 0 0	½	⅜ ½
7500	Pateley Bridge, l, Yorkshire	1 0 0	—	
6000	Pedn-an-drea, t, Redruth	2 18 0	3½	3 3½
12000	Pelyn Wood, c, Lanivery	0 5 6	⅜	¼ ⅜
20000	Penegarreg, l, Carmarthenshire	1 0 0	1¼	1⅛ 1¼
12000	Pen-yr-Orsedd,* l, Flintshire	1 0 0	1	½ ¾
15000	Perran Consols,* s-l	1 0 0	1¼	1 1¼
12000	Perran Wheal Alfred, c	0 2 6	⅜	⅛ ⅜
100000	Pioneer,* var. Wales	1 0 0	—	
3000	Polcrebo, t, Crowan	0 5 0	—	
10000	Polrose, t, Cornwall	1 2 6	¼	⅛ ¼
10000	Port Nigel,* s-l, Carnarvonshire	2 0 0	—	
6000	Prince Royal, t, c, s-l, St. Agnes	1 0 6	—	
12000	Prince of Wales, c, s, Calstock	0 17 0	⅜	¼ ⅜
15000	Royalton,* t, St. Columb	1 0 0	1¼	1 1¼
36000	Russell United,* c, Tavistock	0 15 6	1⅛	⅝ 1⅛
30000	Silver Hill,* Callington	1 0 0	1¼	1 1¼
50000	Sinclair,* l, bl, Whitford	1 0 0	1¼	1 1⅛
40000	Sortridge,* c, Horrabridge	1 0 0	¼	⅛ ¼
6000	South Carbis, t, c, Redruth	0 10 0	2¼	2¼ 2½
35000	So. Devon Unit.,* c, Buckfastleigh.	1 0 0	1	¾ 1
5000	South Dolcoath, c, t, Illogan	0 19 0	1	¾ 1
6000	South Penstruthal, t, c, Gwennap	2 7 6	⅝	⅜ ⅝
6000	South Tolcarne, t, c, Camborne	5 1 6	3½	3 3½
2043	South Wheal Crofty, c, Illogan	2 9 6	12	11 13
40000	Tamar, s-l, Bearalston*	1 0 0	1¾	1½ 1⅞
110000	Tankerville Gt. Consols, l, Salop*.	1 0 0	⅜	¼ ⅜
6400	Teesdale,* l, Durham (pref.)	1 0 0	—	
20000	Tin Hill,* t, St. Stephens	1 0 0	1⅜	1¼ 1⅜
12000	Trebartha Lemarne, t, Northill	0 1 6	⅞	⅝ ⅞
6000	Tregembo, t, c, Cornwall	3 0 0	4	3 4
100000	Tresavean,* t, c, Gwennap	1 0 0	11/16	9/16 11/16
8000	Trevaunance, t, St. Agnes	0 2 0	2¾	2¼ 2¾
12000	Trevince Consols, t, c, Gwennap	0 5 0	—	
35000	Un. Van & Glyn,* l, (& 17500 pref. sh)	1 0 0	½	⅜ ½
1000	Vaughan,* l, Cardiganshire	10 0 0	—	
8000	Victor,* l, Cilcen, Flintshire	0 14 0	—	
2000	Violet Seton, c, Camborne	12 0 0	20	15 20
15000	Vincent,* t, Altarnun	1 0 0	—	
20000	Walkham United,* t, c, Tavistock	1 0 0	5/16	3/16 5/16
12000	West Assheton, l, Carnarvon	1 0 0	—	
12000	West Caradon, c, St. Cleer	0 7 9	⅝	⅜ ⅝
3000	W. Craven Moor, l, Pateley Brdge*	10 0 0	—	
12000	West Crebor, c, Tavistock	0 6 6	½	⅜ ½
10240	West Devon Consols, c, Calstock	1 0 0	⅜	¼ ⅜
10000	West Godolphin, t, c, Breage	1 0 0	2	1½ 1¾
6000	West Kitty, t, St. Agnes	0 12 0	14¼	14¼ 15
20000	West Lisburne,* l, Cardigan	1 0 0	1¼	¾ 1
3000	West Mary Ann, l, Menheniot	1 13 0	1	¾ 1
20000	W. Pateley Bridge, l, Yorkshire	1 0 0	½	¼ ½
6000	West Polbreen, t, c, St. Agnes	0 5 6	1¼	1 1¼
5190	West Poldice, St. Day‡	6 5 0	4¼	3¾ 4¼
2048	West Wheal Frances, t, Illogan‡	33 8 3	10	9¾ 11¼
3000	West Wheal Peevor, t, Redruth	3 0 6	13	12 13
6000	Wheal Agar, c, Illogan‡	15 16 0	17½	12½ 17½
6144	Wheal Basset, c, Illogan‡	6 17 0	10	8 10
3000	Wheal Boys, t, Redruth	0 16 0	1⅛	1 1⅛
12000	Wheal Coates, t, St. Agnes	0 2 0	½	¼ ½
2585	W. Comf., & No. Tres., t, c, Gwennap	2 2 0	1⅛	1¼ 1½
50000	Wheal Elizabeth,* t, Cornwall	1 0 0	—	
12288	Wheal Jane, t, Kea‡	2 1 6	1⅛	⅞ 1⅛
12000	Wheal Jewell, c, St. Hilary	1 0 6	½	⅜ ½
25000	Wh. Hony and Trelawny, s-l, Lisk.	2 0 0	2¾	2½ 2¾
12000	Wheal Lusky, t, Callington	0 1 6	½	⅜ ½
2000	Wheal Owles, t, St. Just‡	7 3 0	10	7 8
6000	Wh. Prussia, & Cardrew, t, c, Rdrth	2 10 0	¾	1 1¼
6000	Wheal Sisters, t, Lelant	3 10 0	1¼	1 1¼
4096	Wheal Uny, t, c, Redruth	16 19 6	5½	4½ 5
4000	Ystwith,* l, Cardigan	1 0 0	⅜	⅛ ⅜

bl, blende; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc; *i*, iron; *a*, arsenic.
*Limited Liability Companies; † quoted on the Stock Exchange; ‡ have paid dividends.

NON-DIVIDEND FOREIGN MINES; FOREIGN AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE COMPANIES; GAS, IRON AND COAL, WAGON COMPANIES, &c.

NON-DIVIDEND FOREIGN MINES

Shares.	Company	Paid.	Clos. pr.
150000	Akankoo,* g, Gold Cst. (100000 iss.)	0 12 6	¼ ½
64880	Anglo-African,* d, Kimberley,†	10 0 0	3 5
12000	Arendal, c, Norway	4 0 0	
120000	Asia Minor,* s-l, Lidjessy, Sivas	0 12 6	½ ¾
30000	Bratsberg,* c, Norway	2 0 0	1⅝ 1⅞
40000	Brazilian, g,* Brazil	1 0 0	1 1⅛
00000	British Australian,* g, N. So. Wales	1 0 0	
18000	Broadway,* g, California	5 0 0	1½ 2
10000	Buena Ventura,* l, Spain (fy. pd)	2 0 0	
30000	California,* g, Colorado	1 0 0	
130000	Callao Bis,* g, Venezuela	1 0 0	
15000	Canada,* g	1 0 0	1 1⅛
82500	Canadian, c, sul,* Canada†	4 0 0	⅞ 1⅛
23000	Central Jagersfontein Diamond*	5 0 0	½ 1
200000	Cherambadi (Wynaad) District,* g.	1 0 0	
500000	Chile,* g, Venezuela	1 0 0	½ ¾
108749	Chontales, g, s, Nicar.*† (98000 iss)	1 0 0	0 ⅛
75000	Colar,* g, Mysore	0 15 0	¼ ½
75000	Colombian Hydraulic, g, Colombia	1 0 0	⅜ ½
65000	Colorado United, s-l Colorado*†‡	5 0 0	1½ 1¾
100000	Cootacovil,* g, Wynaad	0 10 0	½ ¾
52500	Corp. So. Aust. Cop. (44813 sh. ¾ pd)	1 0 0	
20000	Devala Central,* g, Wynaad	1 0 0	¾ 1
100000	Devala Moyar,* g, Wynaad†	1 0 0	1 1⅛
75000	Devala Provident,* g, Wynaad†	0 10 0	1/16 3/16
200000	Dingley Dell,* g, Devala, India	1 0 0	
100000	Don Pedro North del Rey*	1 0 0	⅛ ¼
295168	Eberhardt, s, Nevada*†	1 0 0	¼ ½
65000	Eureka,* s, Nevada	1 0 0	
100000	Exchequer, g, s, California*†	1 0 0	1/16 3/16
160000	Flagstaff District,* s.g. Utah	1 0 0	
65000	Gold Coast,* g, Wassau	1 0 0	
140000	Gold Hill,* g, North Carolina	1 0 0	1 1¼
250000	Gold Mining Assn. of Canada*	1 0 0	
75000	Great Southern Mysore,* g	1 0 0	
120000	Hoover Hill,* g, North Carolina	1 0 0	⅛ ⅜
10000	Hornachos,* s-l, Spain	10 0 0	5 5½
12000	Hultafall,* l, bl, Orebro, Sweden	5 0 0	
400000	Indian Consolidated,* g	1 0 0	11/16 13/16
240000	Ind. Glenrock,* g, Wynaad†	1 0 0	17/16 19/16
150000	Indian Phœnix,* g, Wynaad†	1 0 0	1½ 1¾
150000	Indian Trevelyan,* g, Wynaad	1 0 0	11/16 13/16
150000	Isabelle,* g, s, California	1 0 0	½ ¾
100000	I.X.L., g, s, California*	1 0 0	1/16 3/16
50000	Javali, g, Nicaragua*	2 0 0	
100000	Kapanga,* g, New Zealand	1 0 0	¾ 1
65000	London and California, g*†‡	2 0 0	
135000	Madras,* g, Mysore	1 0 0	
100000	Michipicoten,* nat. c, Quebec	1 0 0	⅞ 1
9000	Missouri, l, pref (fully paid)	10 0 0	
50000	Moselle,* l, b-l, Germany	1 0 0	
35000	Mysore,* g, India†	1 0 0	7/16 9/16
120000	Mysore Reefs,* g, Madras	1 0 0	
40000	Nava de Jadraque,* g, s, Spain	1 0 0	
78500	New Emma,* s, Utah	10 0 0	
37000	N. Gold Run,* hyd, Cal. (& 23000 pref	1 0 0	
75000	Norway,* c, Halsönön and Radön.	1 0 0	
200000	Nouv. Monde, g, Ven. (en com.)†.	1 0 0	¼ ½
160000	Nundydroog,* g, Mysore	1 0 0	
150000	Olathe,* s-l, Leadville, Colorado	1 0 0	
125000	Ooregum,* g, Mysore	1 0 0	⅛ ⅜
15000	Organos,* g, Colombia	1 0 0	2¾ 3¼
20000	Oritá,* g, Colombia	1 0 0	1½ 1⅝
80000	Pestarena United, g, Italy*†	3 0 0	
100000	Pierre d'Or,* g, Spain	1 0 0	
80000	Pierrefitte* (20000 pref.)	1 0 0	
100000	Placerville, g, q, California	1 0 0	1 1⅛
349000	Potosi,* g, Venezuela†	1 0 0	⅜ ⅝
40000	Ravenscliff, g, N. Zlnd; c, S. Aust.	0 5 0	
90000	Rhodes Reef,* g, Wynaad†	1 0 0	15/16 1 1/16
25000	Rico, s, Colorado (non.-assessable).	2 0 0	
8600	Rio Grande do Sul* (and 31,000 pref.)	5 0 0	
100000	Rossa Grande, g, Brazil*† £1 sh.).	1 0 0	
25300	Ruby and Dunderberg, g, Nev.*†	10 0 0	1¾ 2¾

NON-DIVIDEND FOREIGN MINES—*continued.*

Shares.	Company	Paid.	Clos. pr.
34022	San Pedro,* c, Chili	1 17 6	
120000	Santa Cruz,* (ex. 10s. retd. cap.)	1 0 0	⅛ ¼
50000	Sentein,* s-l, bl, Ariège, France	1 0 0	
250000	Silver Peak,* s, Colorado	1 0 0	
200000	Souback & Catir Alan,* s-l, Turkey.	1 0 0	
100000	South-East Wynaad, g, India†	1 0 0	2¼ 2½
50000	Taunus,* s-l, c, Germ. (& 100,000 pf.)	1 0 0	
100000	Tocopilla,* c, Bolivia	0 10 0	½ ¾
43174	United Mexican,*†‡ s, Mexico	29 10 3	1 1¼
50000	Virneberg, c, Rheinbreitb., Ger.*	2 0 0	
120000	Wentworth,* g, Wynaad	1 0 0	½ ¾
100000	West Frntno & Boliv.,* g, Colombia	1 0 0	
100000	Wynaad District,* g, India	1 0 0	
80000	Wynaad Perseverance,*† g	1 0 0	¾ 1
75000	Yorke Peninsula, c, So. Australia†	1 0 0	⅛ ¼
140000	Yuba River,* g, hyd, California	0 15 0	¾ ⅞

INSURANCE COMPANIES.

Issue.	Shares.	Company	Pd.	Clos. pr.
50000	100	Alliance British and Foreign	11	36 37
10000	100	Ditto, Marine	20	20 22
50000	20	British and Foreign Marine [L].	4	22 23
550000	50	Commercial Union	5	22½ 23½
50000	50	Eagle	5	6½ 7
5000	20	Globe Marine [L]	11	¾ 1¼
27500	100	Imperial Life	10	21 22
13453	100	Indemnity Marine	50	16½ 17½
100000	10	Lion Fire [L]	2	
49626	20	L'pool & Lond. Globe (£1 annty)	2	22 24
35862	25	London	12½	59 61
40000	25	London and Lancashire Fire	2½	4¼ 4¾
50000	20	London and Provincial Marine	2	4¾ 5¼
10000	100	Marine	18	26½ 27½
50000	10	Merchants' Marine	2	1⅜ 1⅞
50000	10	Maritime	2	5 6½
40000	50	North British and Mercantile	8¾	60¾ 62
30000	100	Northern	10	47½ 49½
40000	25	Ocean Marine	5	7¾ 8¼
	—	Phœnix Fire	—	290 300
200000	10	Queen	1	3 3½
100000	10	Railway Passengers	29s.	7 7½
200000	5	Rock Life	⅛	8 8½
50000	10	Sea (ex div.)	2	3 11/16 3⅝
135000	20	Lancashire	2	6¾ 7¼
4000	20	Standard Marine	4	1⅞ 2
10000	20	Thames and Mersey Marine [L].	2	12 12½
40640	20	Union Marine, Liverpool [L]	3⅛	4¾ 5¼
50000	20	Universal Marine [L]	3	7 7½

MISCELLANEOUS.

Shares.	Company.	Paid.	Price.
10	Anglo-American Brush	4 0	11½ 12¼
10	Ditto do.	10 0	24 29
5	Australasian Electric	3 0	1¾ 2¼
25	Australian Agricultural	21 10	72 74
5	Brush of Scotland	2 10	1 1½
1	Electric Lgt. & Power Gener.	1 0	⅜ ⅝
5	Hammond Elect. L. & P. Sup.	2 10	7¼ 7¾
5	Indian and Oriental Electric	2 0	1½ 2
1	Maxim Weston Electric	1 0	⅜ ⅝
5	Pilsen Joel Electric	2 0	1¾ 2¼
Stk.	Scottish Australian Invt. Co.	100 0	205 210
Stk.	Ditto New Ordinary	50 0	105 110
Stk.	Ditto 6 per c. guar. pref.	100 0	130 135
Stk.	Ditto 5 per c. guar. pref.	100 0	111 116
5	Swan United Electric	2 0	2 2½
12	Telegraph Const. & Maint. [L]	12 0	30 31
5	Ditto, 2nd Bonus, 3 p. c. (retd. 2	10 0)	1⅜ 1⅝
1	Zoedone [L]	1 0	⅜ ½

IRON AND COAL COMPANIES

Shares.	Company.	Paid.	Price.
£100	Abbot, John, and Co [L]	£75 0	32½ 37½ dis
5	Alltami Colliery Co. [L]	5 0	
100	Ashbury Co. [L] (new)	90 0	25 27
3	Bagnall, John, and Sons [L]	3 0	
10	Benhar Coal Co. [L]	10 0	
10	Bilbao Iron Co. [L]	10 0	5¼ 5¾
20	Bolckow, Vaughan, & Co. [L] A	12 0	14⅜ 14⅝ xd
50	Brown, Bailey, and Dixon [L]	40 0	22 20 dis
100	Brown, John, and Co. [L]	75 0	62½ 65
100	Cammell and Co. [L]	80 0	63 70
20	Cannock & Huntington Coal [L]	10 0	10½ 10 dis
10	Central Swedish Iron & Stl. [L]	10 0	1 1½
50	Charlton Iron Co. [L]	50 0	3 3½
50	Chatterley Iron Co. [L]	50 0	6½ 7
10	Chillington Iron Co. [L]	10 0	1¾ 2¼
10	Consett Iron Co. [L]	7 10	22 24
1	Consett Spanish Ore [L]	1 0	⅝ ¾ pm
20	Darlington Iron Co. [L]	18 10	1 1½ dis
50	Davy Brothers [L]	22 10	4 4½ pm
23	Ebbw Vale Co. [L]	20 0	9 9½
8	Genl. Mining Ass. [L] (ful. pd.)	8 0	4¾ 5¼
50	Knowles, Andrew, and Co. [L]	25 0	11 12
20	Llynvi and Tondu [L]	20 0	6 6½
10	Lydney & Wigpool Iron Ore [L]	9 12	1 2
10	Marbella Iron Ore Co. [L]	10 0	5¾ 6¼
10	Midland Iron Co. [L]	5 0	1½ 2 pm
10	Monkland Iron & Coal Co. [L]	10 0	
4	Mwyndy Iron Ore [L]	3 15	1 1¼
100	Nant-y-Glo & Blaina (8 p.c. prf.)	100 0	48 50
3	Nerbudda Coal and Iron [L]	2⅛	¾ 1
10	Newport Abercarn Coal Co. [L]	10 0	8¾ 9¼
35	Palmer's Shipbldg. & Iron [L]	35 0	25 25½
100	Parkgate Iron Co. [L]	65 0	68 69
20	Patent Nut and Bolt [L]	14 0	23 24
50	Pearson and Knowles, A,	50 0	45 48
20	Pelsall Coal and Iron [L]	20 0	12½ 13
5	Rhymney Iron Co. [L]	5 0	1½ 2
10	Sandwell Park Colliery Co. [L]	10 0	12½ 12¾
100	Shotts Iron Co. [L]	100 0	47½ 50
25	Sheepbridge Iron and Coal [L]	20 0	10¾ 11¼
50	Silkstone & Dodw. Cl. & Iron [L]	45 0	
50	Somorrostro Iron Co. [L]	50 0	
100	Staveley Iron and Coal Co. [L]	60 0	72 73
100	Ditto ditto B	10 0	12½ 13
5	Teesside Iron & Engine Works	5 0	1¼ 1¾
50	Tredegar Iron and Coal, A [L]	30 0	26 26½
25	Ditto ditto B	25 0	22 22½
10	Vancouver Coal [L]	6 0	2½ 3⅛
25	W. Cumberland Iron & Steel [L]	20 0	14 15

BANKS.

Issue.	Shares.	Company	Pd.	Clos. pr.
100000	10	Agra [L]	all	10 10½
80000	20	Anglo-Egyptian Banking [L]	all	22 23
30000	40	Bank of Australasia	all	80 82
12500	20	Bank of British Columbia	all	21 22
120600	50	Bank of British North America	all	54 56
10000	25	Bank of Egypt	all	23 25
50000	20	Bank of New South Wales	all	65 67
100000	10	Bank of New Zealand	all	27½ 28½
25000	25	Bank of South Australia	all	39 41
120000	50	Bank of Victoria	25	35 36
40000	20	Chartrd. of Ind., Aust., & China.	all	24 25
30000	25	Ch. Merc. of Ind., Lond., China.	all	17½ 18½
20000	100	Colonial	30	66 68
50000	20	English Bk. of Rio de Janeiro [L]	10	14 14½
60000	25	London and River Plate [L]	10	14½ 15½
60000	7	London and San Francisco [L]	all	7 7½
50000	20	London Chartered of Australia	all	22½ 23½
100000	10	National Bank of N. Zealand [L]	3½	3½ 4
60000	25	Oriental Bank Corporation	all	14½ 15½
12500	10	Queensland National [L]	5	9 9½
34000	100	Stndrd. of British So. Africa [L].	25	60½ 61½
60000	25	Union of Australia	all	64½ 65½

GAS COMPANIES.

Issue.	Shares.	Company	Pd.	Clos. pr.
5000	20	Bahia [L]	all	18 19
10000	5	Bombay [L]	all	5⅛ 6
10000	5	Ditto, New [L]	4	4¼ 4¾
29700	Stk	Brentford Consolidated	100	150 155
14000	20	British	all	35 37
50000	Stk	Commercial	100	193 194
20000	20	Continental Union [L]	all	25½ 26½
520000	20	Do. do. New, 1869, 1872	14	17 18
10000	20	Do. do. 7 per ct. Preference	all	25 26
23406	10	European [L]	all	18½ 19½
94850	Stk	Gaslight and Coke, A, Ord.	100	170 175
281200	Stk	Do, 4 per cent. Deb. Stock	100	103 105
5000	10	Hong Kong and China	all	14½ 15½
2300000	Stk	Imperial Continental	100	193 196
386500	Stk	London	100	212 217
12000	5	Malta & Mediterranean [L]	all	1¾ 2¼
100000		Metrop. of Melbourne 6 p.c. Deb.		
25000	20	Monte Video [L]	all	12½ 13½
10000	5	Ottoman [L]	all	2¾ 3¼
30000	5	Oriental [L]	all	6 7
27500	20	Rio de Janeiro [L]	all	25½ 26½
500000	Stk	South Metropolitan, A	100	203 208
60000	Stk	Ditto, ditto. B	100	175 180

TRAMWAYS.

Issue.	Shares.	Company	Pd.	Clos. pr.
40000	5	Anglo-Argentine [L]	all	5½ 6
10000	10	Barcelona [L]	all	10½ 10¾
7140	10	Belfast Street Tramways	all	7½ 8
3050	10	Birkenhead, Ordinary	all	2½ 3½
3000	10	Ditto, 6 per cent. Preference	all	7 9
9290	10	Bristol [L]	10	8 9
25000	10	Bordeaux Tram & Omnibus [L].	all	9 9½
3200	10	Chester [L]	all	
24000	10	Dublin	all	9¾ 10¼
14690	10	Edinburgh Street Tramways	all	11½ 12½
35000	10	Glasgow Tramway & Omni. [L].	9	17½ 18½
10000	10	Hughes Loco. and Tram. works.	all	
7500	10	Hull Street Tramways	all	8 8½
7500	10	Imperial [L]	all	1 1½
34000	10	Liverpool Unit. Tram & Om. [L]	all	12 12½
25000	10	London [L]	all	13 13½
15000	10	London Street Tramways	all	13¼ 13¾
60000	10	North Metropolitan	all	17¼ 17¾
8000	10	Nottingham and District [L]	all	9½ 10
15947	10	Provincial [L]	all	9¼ 9¾
6000	10	Sheffield	all	6½ 7½
5000	10	Southampton	all	6½ 7½
6000	10	Sunderland [L]	all	1½ 2½
10000	10	Swansea [L]	all	5 6
12000	10	Tramways of France [L]	all	5 6
16500	10	Tramways of Germany [L]	all	10½ 11
20000	5	Tramways and Gen. Works [L].	all	4¼ 4¾
40000		Tramways Union [L]	all	4½ 5
25000	10	Vale of Clyde	6	
7200	10	Wolverhampton [L]	all	5 5½

TELEGRAPH COMPANIES.

Shares.	Company	Pd.	Clos. pr.
Stk.	Anglo-American	100 0	51 52
10	Brazilian Submarine	10 0	12 12½
10	Cuba	10 0	9¾ 10¼
10	Direct Spanish	9 0	6½ 7
20	Direct United States Cable	20 0	11¾ 12¼
10	Eastern	10 0	10⅞ 11⅛
10	East. Exten. Austr. and China	10 0	11¼ 11¾
10	German Union	10 0	9¾ 10¼
10	Great Northern	10 0	12¼ 12¾
25	Indo-European	25 0	29 30
10	London Platino Brazilian	10 0	4½ 5

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